FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO
Luminant Generation Company LLC

AUTHORIZING THE OPERATION OF
Sandow Steam Electric Station
Electric Services

LOCATED AT
Milam County, Texas
Latitude 30° 33' 51" Longitude 97° 3' 50"
Regulated Entity Number: RN102147881

This permit is issued in accordance with and subject to the Texas Clean Air Act (TCAA), Chapter 382 of the Texas Health and Safety Code and Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122), Federal Operating Permits. Under 30 TAC Chapter 122, this permit constitutes the permit holder's authority to operate the site, emission units and affected source listed in this permit. Operations of the site, emission units and affected source listed in this permit are subject to all additional rules or amended rules and orders of the Commission pursuant to the TCAA.

This permit does not relieve the permit holder from the responsibility of obtaining New Source Review authorization for new, modified, or existing facilities in accordance with 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification.

The site, emission units and affected source authorized by this permit shall be operated in accordance with 30 TAC Chapter 122, the general terms and conditions, special terms and conditions, and attachments contained herein.

This permit shall expire five years from the date of issuance. The renewal requirements specified in 30 TAC § 122.241 must be satisfied in order to renew the authorization to operate the site, emission units and affected source.

Permit No: O54 Issuance Date: _____

_____
For the Commission

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General Terms and Conditions

The permit holder shall comply with all terms and conditions contained in 30 TAC § 122.143 (General Terms and Conditions), 30 TAC § 122.144 (Recordkeeping Terms and Conditions), 30 TAC § 122.145 (Reporting Terms and Conditions), and 30 TAC § 122.146 (Compliance Certification Terms and Conditions).

In accordance with 30 TAC § 122.144(1), records of required monitoring data and support information required by this permit, or any applicable requirement codified in this permit, are required to be maintained for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. The five year record retention period supersedes any less stringent retention requirement that may be specified in a condition of a permit identified in the New Source Review Authorization attachment.

If the permit holder chooses to demonstrate that this permit is no longer required, a written request to void this permit shall be submitted to the Texas Commission on Environmental Quality (TCEQ) by the Responsible Official in accordance with 30 TAC § 122.161(e). The permit holder shall comply with the permit's requirements, including compliance certification and deviation reporting, until notified by the TCEQ that this permit is voided.

The permit holder shall comply with 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit.

All reports required by this permit, except for reports required solely by the Acid Rain permit or the Cross-State Air Pollution Rule Trading Program requirements, unless they are being used to demonstrate compliance with another requirement, must include in the submittal a cover letter which identifies the following information: company name, TCEQ regulated entity number, air account number (if assigned), site name, area name (if applicable), and Air Permits Division permit number(s).

Special Terms and Conditions:

Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting

1. Permit holder shall comply with the following requirements:

   A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.

   B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.

   C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses,

subclauses, and items contained within the referenced citation as applicable requirements.

D. When a grouped citation, notated with a [G] in the Applicable Requirements Summary, contains multiple compliance options, the permit holder must keep records of when each compliance option was used.

E. Emission units subject to 40 CFR Part 63, Subpart ZZZZ, Subpart DDDDD, and Subpart UUUUU as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, §113.1090, §113.1130, and §113.1300, which incorporate the 40 CFR Part 63 Subparts by reference.

F. The permit holder shall comply with the following 30 TAC Chapter 101, Subchapter H, Division 2 (Emissions Banking and Trading of Allowances) Requirements for an electric generating facility authorized under 30 TAC Chapter 116, Subchapter I:

(i) Title 30 TAC § 101.332 (relating to General Provisions)

(ii) Title 30 TAC § 101.333 (relating to Allocation of Allowances)

(iii) Title 30 TAC § 101.334 (relating to Allowance Deductions)

(iv) Title 30 TAC § 101.335 (relating to Allowance Banking and Trading)

(v) Title 30 TAC § 101.336 (relating to Emission Monitoring and Compliance Demonstration and Reporting)

(vi) The terms and conditions by which the emission limits are established to meet the quantity of allowances for the electric generating facility are applicable requirements of this permit

G. For the purpose of generating discrete emission reduction credits through 30 TAC Chapter 101, Subchapter H, Division 4 (Discrete Emission Credit Banking and Trading), the permit holder shall comply with the following requirements:

(i) Title 30 TAC § 101.372 (relating to General Provisions)

(ii) Title 30 TAC § 101.373 (relating to Discrete Emission Reduction Credit Generation and Certification)

(iii) Title 30 TAC § 101.374 (relating to Mobile Discrete Emission Reduction Credit Generation and Certification)

(iv) Title 30 TAC § 101.378 (relating to Discrete Emission Credit Banking and Trading)

(v) The terms and conditions by which the emission limits are established to generate the discrete reduction credit are applicable requirements of this permit

2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):

A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements

B. Title 30 TAC § 101.3 (relating to Circumvention)

C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ

D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ

E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)

F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)

G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)

H. Title 30 TAC § 101.221 (relating to Operational Requirements)

I. Title 30 TAC § 101.222 (relating to Demonstrations)

J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)

3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:

A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A, Division 1 , shall not exceed 20% opacity averaged over a six-minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:

(i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)

(ii) Title 30 TAC § 111.111(a)(1)(E)

(iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)

(iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive ventilation, such as plumbing vents; or vent emissions from any other source that does not obstruct the transmission of light. Vents, as specified in the “Applicable Requirements Summary” attachment, that are

subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:

(1) An observation of stationary vents from emission units in operation shall be conducted at least once during each calendar quarter unless the emission unit is not operating for the entire quarter.

(2) For stationary vents from a combustion source, if an alternative to the normally fired fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are present. If such period is greater than 3 months, observations shall be conducted once during each quarter. Supplementing the normally fired fuel with natural gas or fuel gas to increase the net heating value to the minimum required value does not constitute creation of an alternative fuel.

(3) Records of all observations shall be maintained.

(4) Visible emissions observations of emission units operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of emission units operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions observations shall be made during times when the activities described in 30 TAC § 111.111(a)(1)(E) are not taking place. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(5) Compliance Certification:

(a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).

(b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the

appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

(c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.

B. For visible emissions from a building, enclosed facility, or other structure; the permit holder shall comply with the following requirements:

(i) Title 30 TAC § 111.111(a)(7)(A) (relating to Requirements for Specified Sources)

(ii) Title 30 TAC § 111.111(a)(7)(B)(i) or (ii)

(iii) For a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source subject to 30 TAC § 111.111(a)(7)(A), complying with 30 TAC § 111.111(a)(7)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:

(1) An observation of visible emissions from a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source which is required to comply with 30 TAC § 111.111(a)(7)(A) shall be conducted at least once during each calendar quarter unless the air emission source or enclosed facility is not operating for the entire quarter.

(2) Records of all observations shall be maintained.

(3) Visible emissions observations of air emission sources or enclosed facilities operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of air emission sources or enclosed facilities operated only at night must be made with additional lighting and the temporary

installation of contrasting backgrounds. Visible emissions shall be determined with each emissions outlet in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each emissions outlet during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(4) Compliance Certification:

(a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(7) and (a)(7)(A)

(b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(7)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader

C. For visible emissions from all other sources not specified in 30 TAC § 111.111(a)(1), (4), or (7); the permit holder shall comply with the following requirements:

(i) Title 30 TAC § 111.111(a)(8)(A) (relating to Requirements for Specified Sources)

(ii) Title 30 TAC § 111.111(a)(8)(B)(i) or (ii)

(iii) For a source subject to 30 TAC § 111.111(a)(8)(A), complying with 30 TAC § 111.111(a)(8)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic

monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:

(1) An observation of visible emissions from a source which is required to comply with 30 TAC § 111.111(a)(8)(A) shall be conducted at least once during each calendar quarter unless the source is not operating for the entire quarter.

(2) Records of all observations shall be maintained.

(3) Visible emissions observations of sources operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of sources operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each source in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each source during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(4) Compliance Certification:

(a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(8) and (a)(8)(A)

(b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(8)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

D. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.

E. For emission units with contributions from uncombined water, the permit holder shall comply with the requirements of 30 TAC § 111.111(b).

F. Emission limits on nonagricultural processes, except for the steam generators specified in 30 TAC § 111.153, shall comply with the following requirements:

(i) Emissions of PM from any source may not exceed the allowable rates as required in 30 TAC § 111.151(a) (relating to Allowable Emissions Limits)

(ii) Sources with an effective stack height (h_e) less than the standard effective stack height (H_e), must reduce the allowable emission level by multiplying it by $[h_e/H_e]^2$ as required in 30 TAC § 111.151(b)

(iii) Effective stack height shall be calculated by the equation specified in 30 TAC § 111.151(c)

G. Outdoor burning, as stated in 30 TAC § 111.201, shall not be authorized unless the following requirements are satisfied:

(i) Title 30 TAC § 111.205 (relating to Exception for Fire Training)

(ii) Title 30 TAC § 111.207 (relating to Exception for Recreation, Ceremony, Cooking, and Warmth)

(iii) Title 30 TAC § 111.209 (relating to Exception for Disposal Fires)

(iv) Title 30 TAC § 111.219 (relating to General Requirements for Allowable Outdoor Burning)

(v) Title 30 TAC § 111.221 (relating to Responsibility for Consequences of Outdoor Burning)

4. Permit holder shall comply with the following 30 TAC Chapter 115, Subchapter C requirements:

A. When filling gasoline storage vessels with a nominal capacity greater than 1,000 gallons (Stage I) at motor vehicle fuel dispensing facilities, which have dispensed less than 100,000 gallons of gasoline in any calendar month after October 31, 2014, the permit holder shall comply with the following requirements specified in 30 TAC Chapter 115, Subchapter C:

(i) Title 30 TAC § 115.222(3) (relating to Control Requirements), as it applies to liquid gasoline leaks, visible vapors, or significant odors

(ii) Title 30 TAC § 115.222(6) (relating to Control Requirements)

(iii) Title 30 TAC § 115.224(1) (relating to Inspection Requirements), as it applies to liquid gasoline leaks, visible vapors, or significant odors

(iv) Title 30 TAC § 115.226(2)(B) (relating to Recordkeeping Requirements)

B. When filling stationary gasoline storage containers with a nominal capacity less than or equal to 1,000 gallons at a Stage I motor vehicle fuel dispensing facility, the permit holder shall comply with the following requirements specified in 30 TAC Chapter 115, Subchapter C:

(i) Title 30 TAC § 115.222(3) (relating to Control Requirements), as it applies to liquid gasoline leaks, visible vapors, or significant odors

(ii) Title 30 TAC § 115.222(6) (relating to Control Requirements)

(iii) Title 30 TAC § 115.224(1) (relating to Inspection Requirements), as it applies to liquid gasoline leaks, visible vapors, or significant odors

5. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 60, unless otherwise stated in the applicable subpart:

A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping)

B. Title 40 CFR § 60.8 (relating to Performance Tests)

C. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements)

D. Title 40 CFR § 60.12 (relating to Circumvention)

E. Title 40 CFR § 60.13 (relating to Monitoring Requirements)

F. Title 40 CFR § 60.14 (relating to Modification)

G. Title 40 CFR § 60.15 (relating to Reconstruction)

H. Title 40 CFR § 60.19 (relating to General Notification and Reporting Requirements)

6. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.

7. For site remediation projects subject to 40 CFR Part 63, Subpart GGGGG that will remove remediation material containing less than 1 megagram per year of the HAP listed in Table 1 to Subpart GGGGG, the permit holder shall comply with 40 CFR § 63.7881(c)(1) - (3) (Title 30 TAC Chapter 113, Subchapter C, § 113.1160 incorporated by reference).

8. The permit holder shall comply with certified registrations submitted to the TCEQ for purposes of establishing federally enforceable emission limits. A copy of the certified registration shall be maintained with the permit. Records sufficient to demonstrate compliance with the established limits shall be maintained. The certified registration and records demonstrating compliance shall be provided, on request, to representatives of the appropriate TCEQ regional office and any local air pollution control agency having jurisdiction over the site. The permit holder shall submit updated certified registrations when changes at the site require establishment of new emission limits. If

changes result in emissions that do not remain below major source thresholds, the permit holder shall submit a revision application to codify the appropriate requirements in the permit.

9. The permit holder shall meet the standards, monitoring, and reporting requirements set forth by the United States District Court for the Western District of Texas, Austin Division, in the Order Granting United States' Motion to Approve Stipulation to Resolve Certain alleged Violations of Consent Decree (Stipulated Order) issued on February 27, 2007 pursuant to Civil Action No. A 03 CA 222 SS, which are set forth in the Stipulated Order as follows:

"NOx Emission Controls at Sandow Unit 4:"

A. "By December 31, 2006, TXU Sandow shall submit to TCEQ, with a copy to the United States, a complete application for a permit or permit modification to install a selective catalytic reduction ("SCR") at Sandow Unit 4 on Alcoa's Rockdale, Texas facility. In its application, TXU Sandow shall propose a 30-Day Rolling Average NOx Emission Rate of no less than 0.080 lbs/MMBtu, including periods of startup and shutdown, but excluding malfunctions, as provided in the Consent Decree. If permitted by TCEQ, TXU Sandow shall commence operation of the SCR by June 1, 2010, and shall operate such control device at all times that Sandow Unit 4 is in operation, consistent with the technological limitations, manufacturers' specifications, and good engineering and maintenance practices for the SCR. The United States has informed the Court that it supports the installation of an SCR at Sandow 4 and agrees that SCR is a technologically practicable and feasible control for NOX emissions on pulverized lignite fired units."

B. "Upon commencement of operation of the SCR at Sandow 4, TXU Sandow shall achieve and maintain a 30- Day Rolling Average NOx Emission Rate that is no less stringent than 0.080 lb/MMBtu. TXU Sandow shall monitor its NOx emissions at Sandow 4 in accordance with the provisions in Paragraphs 75-77 of the Consent Decree. The emissions reductions from the operation of an SCR at Sandow Unit 4 shall not be subject to the prohibition on selling or trading NOx allowances in Paragraph 88 of the Consent Decree; these prohibitions shall apply only to the Consent Decree's obligations at Sandow 5 and the Existing Sandow Units and the Replacement Sandow Unit; provided, however, that neither Alcoa nor TXU Sandow shall use any of the emission reductions under this Order to "net out" of New Source Review at other electricity generating units, as prohibited in Paragraph 91 of the Consent Decree."

C. "If TCEQ declines to issue a permit authorizing the installation and operation of an SCR at Sandow Unit 4, TXU Sandow will be relieved of its obligation to install and operate an SCR at Sandow Unit 4."

Additional Monitoring Requirements

10. Unless otherwise specified, the permit holder shall comply with the compliance assurance monitoring requirements as specified in the attached "CAM Summary" upon issuance of the permit. In addition, the permit holder shall comply with the following:

A. The permit holder shall comply with the terms and conditions contained in 30 TAC § 122.147 (General Terms and Conditions for Compliance Assurance Monitoring).

B. The permit holder shall report, consistent with the averaging time identified in the "CAM Summary," deviations as defined by the deviation limit in the "CAM Summary." Any monitoring data below a minimum limit or above a maximum limit, that is collected in accordance with the requirements specified in 40 CFR § 64.7(c), shall be reported as a deviation. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

C. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time specified in the "CAM Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances in order to avoid reporting deviations. All monitoring data shall be collected in accordance with the requirements specified in 40 CFR § 64.7(c).

D. The permit holder shall operate the monitoring, identified in the attached "CAM Summary," in accordance with the provisions of 40 CFR § 64.7.

E. The permit holder shall comply with the requirements of 40 CFR § 70.6(a)(3)(ii)(A) and 30 TAC § 122.144(1)(A)-(F) for documentation of all required inspections.

11. The permit holder shall comply with the periodic monitoring requirements as specified in the attached "Periodic Monitoring Summary" upon issuance of the permit. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permit holder shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time specified in the "Periodic Monitoring Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances to avoid reporting deviations. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

New Source Review Authorization Requirements

12. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule, standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:

A. Are incorporated by reference into this permit as applicable requirements

B. Shall be located with this operating permit

C. Are not eligible for a permit shield

13. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.

14. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, safety data sheets (SDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).

15. The permit holder shall comply with the following requirements for Air Quality Standard Permits:

    A. Registration requirements listed in 30 TAC § 116.611, unless otherwise provided for in an Air Quality Standard Permit

    B. General Conditions listed in 30 TAC § 116.615, unless otherwise provided for in an Air Quality Standard Permit

    C. Applicable requirements of 30 TAC § 116.617 for Pollution Control Projects based on the information contained in the registration application.

    D. Applicable requirements of the non-rule Air Quality Standard Permit for Pollution Control Projects based on the information contained in the registration application.

Compliance Requirements

16. The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.

17. Permit holder shall comply with the following 30 TAC Chapter 117 requirements:

    A. The permit holder shall comply with the compliance schedule as required in 30 TAC § 117.9300 for electric utilities in East and Central Texas.

18. Use of Discrete Emission Credits to comply with the applicable requirements:

A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:

(i) Title 30 TAC Chapter 115

(ii) Title 30 TAC Chapter 117

(iii) If applicable, offsets for Title 30 TAC Chapter 116

(iv) Temporarily exceed state NSR permit allowables

B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:

(i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)

(ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4

(iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)

(iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122

(v) Title 30 TAC § 101.375 (relating to Emission Reductions Achieved Outside the United States)

Risk Management Plan

19. For processes subject to 40 CFR Part 68 and specified in 40 CFR § 68.10, the permit holder shall comply with the requirements of the Accidental Release Prevention Provisions in 40 CFR Part 68. The permit holder shall submit to the appropriate agency either a compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR § 68.10(a), or as part of the compliance certification submitted under this permit, a certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of a risk management plan.

Protection of Stratospheric Ozone

20. Permit holders at a site subject to Title VI of the FCAA Amendments shall meet the following requirements for protection of stratospheric ozone:

A. Any on site servicing, maintenance, and repair on refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants or non-exempt substitutes shall be conducted in accordance with 40 CFR Part 82, Subpart F. Permit holder shall ensure that repairs or refrigerant removal are performed only by persons who meet the technician certification requirements

of 40 CFR §82.161(a). Records shall be maintained as required by 40 CFR Part 82, Subpart F.

B. The permit holder shall comply with 40 CFR Part 82, Subpart H related to Halon Emissions Reduction requirements as specified in 40 CFR § 82.250 - § 82.270 and the applicable Part 82 Appendices.

Temporary Fuel Shortages (30 TAC § 112.15)

21. The permit holder shall comply with the following 30 TAC Chapter 112 requirements:

A. Title 30 TAC § 112.15 (relating to Temporary Fuel Shortage Plan Filing Requirements)

B. Title 30 TAC § 112.16(a), (a)(1), and (a)(2)(B) - (C) (relating to Temporary Fuel Shortage Plan Operating Requirements)

C. Title 30 TAC § 112.17 (relating to Temporary Fuel Shortage Plan Notification Procedures)

D. Title 30 TAC § 112.18 (relating to Temporary Fuel Shortage Plan Reporting Requirements)

Permit Location

22. The permit holder shall maintain a copy of this permit and records related to requirements listed in this permit on site.

Acid Rain Permit Requirements

23. For unit S4MB, located at the affected source identified by ORIS/Facility code (6648), the designated representative and the owner or operator, as applicable, shall comply with the following Acid Rain Permit requirements.

A. General Requirements

(i) Under 30 TAC § 122.12(1) and 40 CFR Part 72, the Acid Rain Permit requirements contained here are a separable portion of the Federal Operating Permit (FOP) and have an independent public comment process which may be separate from, or combined with the FOP.

(ii) The owner and operator shall comply with the requirements of 40 CFR Part 72 and 40 CFR Part 76. Any noncompliance with the Acid Rain Permit will be considered noncompliance with the FOP and may be subject to enforcement action.

(iii) The owners and operators of the affected source shall operate the source and the unit in compliance with the requirements of this Acid Rain Permit and all other applicable State and federal requirements.

(iv) The owners and operators of the affected source shall comply with the General Terms and Conditions of the FOP that incorporates this Acid Rain Permit.

(v) The term for the Acid Rain permit shall commence with the issuance of the FOP that incorporates the Acid Rain permit and shall be run concurrent with the remainder of the term of the FOP. Renewal of the Acid Rain permit shall coincide with the renewal of the FOP that incorporates the Acid Rain permit and subsequent terms shall be no more than five years from the date of renewal of the FOP and run concurrent with the permit term of the FOP.

B. Monitoring Requirements

(i) The owners and operators, and the designated representative, of the affected source and each affected unit at the source shall comply with the monitoring requirements contained 40 CFR Part 75.

(ii) The emissions measurements recorded and reported in accordance with 40 CFR Part 75 and any other credible evidence shall be used to determine compliance by the affected source with the acid rain emissions limitations and emissions reduction requirements for SO_2 and NO_x under the ARP.

(iii) The requirements of 40 CFR Part 75 shall not affect the responsibility of the owners and operators to monitor emission of other pollutants or other emissions characteristics at the unit under other applicable requirements of the FCAA Amendments (42 U.S.C. 7401, as amended November 15, 1990) and other terms and conditions of the operating permit for the source.

C. SO_2 emissions requirements

(i) The owners and operators of each source and each affected unit at the source shall comply with the applicable acid rain emissions limitations for SO_2.

(ii) As of the allowance transfer deadline the owners and operators of the affected source and each affected unit at the source shall hold, in the unit's compliance subaccount, allowances in an amount not less than the total annual emissions of SO_2 for the previous calendar year.

(iii) Each ton of SO_2 emitted in excess of the acid rain emissions limitations for SO_2 shall constitute a separate violation of the FCAA amendments.

(iv) An affected unit shall be subject to the requirements under (i) and (ii) of the SO_2 emissions requirements as follows:

(1) Starting January 1, 2000, an affected unit under 40 CFR § 72.6(a)(2); or

(2) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR Part 75, an affected unit under 40 CFR § 72.6(a)(3).

(v) Allowances shall be held in, deducted from, or transferred into or among Allowance Tracking System accounts in accordance with the requirements of the ARP.

(vi) An allowance shall not be deducted, for compliance with the requirements of this permit, in a calendar year before the year for which the allowance was allocated.

(vii) An allowance allocated by the EPA Administrator or under the ARP is a limited authorization to emit SO_2 in accordance with the ARP. No provision of the ARP, Acid Rain permit application, this Acid Rain Permit, or an exemption under 40 CFR §§ 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.

(viii) An allowance allocated by the EPA Administrator under the ARP does not constitute a property right.

D. NO_x Emission Requirements

(i) The owners and operators of the source and each affected unit at the source shall comply with the applicable acid rain emissions limitations for NO_x under 40 CFR Part 76.

(ii) The owners and operators shall comply with an NOx early election compliance plan for unit S4MB under Phase II of the acid rain program, pursuant to 40 CFR § 76.8(d)(2). This plan is approved by the TCEQ and is effective January 1, 2000 through December 31, 2007, under which each unit's annual average NOx emission rate for each year, determined using the methods and procedures specified in 40 CFR Part 75, shall not exceed the applicable emission limitation, under 40 CFR § 76.5(a), of 0.45 lb/MMBtu for tangentially fired units. If the unit is in compliance with its applicable emission limitation for each year of the plan, then the unit shall not be subject to the standard NOx applicable emission limitations under 40 CFR § 76.7(a) until January 1, 2008.

(iii) The Phase II NOx early election compliance plan shall be in effect only until the earlier of January 1, 2008 or January 1 of the calendar year for which a termination of this plan takes effect. If the designated representative of the unit under this plan fails to demonstrate compliance with the NOx early elect compliance plan applicable emission limitation under 40 CFR § 76.5(a), of for any year during the period beginning January 1, 2000 and ending December 31, 2007, then the TCEQ will terminate this early elect compliance plan. The termination will take effect beginning January 1 of the year following the year for which there is a failure to demonstrate compliance, and the designated representative may not submit a new early election plan. The designated representative of the unit may terminate this plan any year prior to 2008 but may not submit a new early election plan. In order to terminate this early elect compliance plan, the designated representative must submit a notice under 40 CFR § 72.40(d) by January 1 of the year for which the termination is to take effect. If the early election compliance plan is terminated on or after 2000, the unit shall not exceed the standard NOx applicable emission limitations under 40 CFR § 76.7(a) beginning on the effective date of the termination of the early election plan.

(iv) Beginning on the effective date of the termination of the early election plan, but no later than January 1, 2008, the owners and operators shall

comply with the Phase II NOx standard emission limitation compliance plan for unit S4MB, under which each unit's annual average NOx emission rate for each year, determined using the methods and procedures specified in 40 CFR Part 75, shall not exceed the applicable emission limitation of 0.40 lb/MMBtu for tangentially fired units under 40 CFR § 76.7(a)(1).

E. Excess emissions requirements for SO_2 and NO_x.

(i) The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR Part 77.

(ii) If an affected source has excess emissions in any calendar year shall, as required by 40 CFR Part 77:

(1) Pay, without demand, the penalty required and pay, upon demand, the interest on that penalty.

(2) Comply with the terms of an approved offset plan.

F. Recordkeeping and Reporting Requirements

(i) Unless otherwise provided, the owners and operators of the affected source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the permitting authority or the EPA Administrator.

(1) The certificate of representation for the designated representative for the source and each affected unit and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR § 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative.

(2) All emissions monitoring information, in accordance with 40 CFR Part 75, provided that to the extent that 40 CFR Part 75 provides for a 3-year period for recordkeeping (rather than a five-year period cited in 30 TAC § 122.144), the 3-year period shall apply.

(3) Copies of all reports, compliance certifications, and other submissions and all records made or required under the ARP or relied upon for compliance certification.

(4) Copies of all documents used to complete an acid rain permit application and any other submission under the ARP or to demonstrate compliance with the requirements of the ARP.

(ii) The designated representative of an affected source and each affected unit at the source shall submit the reports required under the ARP including those under 40 CFR Part 72, Subpart I and 40 CFR Part 75.

G. Liability

(i) Any person who knowingly violates any requirement or prohibition of the ARP, a complete acid rain permit application, an acid rain permit, or a written exemption under 40 CFR §§ 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to FCAA § 113(c).

(ii) Any person who knowingly makes a false, material statement in any record, submission, or report under the ARP shall be subject to criminal enforcement pursuant to FCAA § 113(c) and 18 U.S.C. 1001.

(iii) No permit revision shall excuse any violation of the requirements of the ARP that occurs prior to the date that the revision takes effect.

(iv) The affected source and each affected unit shall meet the requirements of the ARP contained in 40 CFR Parts 72 through 78.

(v) Any provision of the ARP that applies to an affected source or the designated representative of an affected source shall also apply to the owners and operators of such source and of the affected units at the source.

(vi) Any provision of the ARP that applies to an affected unit (including a provision applicable to the DR of an affected unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR § 72.44 (Phase II repowering extension plans) and 40 CFR § 76.11 (NO_x averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR Part 75 (including 40 CFR §§ 75.16, 75.17, and 75.18), the owners and operators and the DR of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the DR and that is located at a source of which they are not owners or operators or the DR.

(vii) Each violation of a provision of 40 CFR Parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or DR of such source or unit, shall be a separate violation of the FCAA Amendments.

H. Effect on other authorities. No provision of the ARP, an acid rain permit application, an acid rain permit, or an exemption under 40 CFR §§ 72.7 or 72.8 shall be construed as:

(i) Except as expressly provided in Title IV of the FCAA Amendments, exempting or excluding the owners and operators and, to the extent applicable, the DR of an affected source or affected unit from compliance with any other provision of the FCAA Amendments, including the provisions of Title I of the FCAA Amendments relating to applicable National Ambient Air Quality Standards or State Implementation Plans.

(ii) Limiting the number of allowances a unit can hold; provided, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the FCAA Amendments.

(iii) Requiring a change of any kind in any state law regulating electric utility rates and charges, affecting any state law regarding such state regulation, or limiting such state regulation, including any prudence review requirements under such state law.

(iv) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,

(v) Interfering with or impairing any program for competitive bidding for power supply in a state in which such program is established.

I. The number of SO_2 allowances allocated by the EPA in 40 CFR Part 73 is enforceable only by the EPA Administrator.

Cross-State Air Pollution Rule (CSAPR) Trading Program Requirements

24. For unit S4MB, located at the site identified by Plant code/ORIS/Facility code 6648, the designated representative and the owner or operator, as applicable, shall comply with the following CSAPR requirements. Until approval of a Texas CSAPR SIP by EPA, the permit holder shall comply with the equivalent requirements of 40 CFR Part 97.

A. General Requirements

(i) The owners and operators of the CSAPR NO_X and the CSAPR SO_2 source shall operate the source and the unit in compliance with the requirements of the applicable CSAPR Trading Programs and all other applicable State and federal requirements.

(ii) The owners and operators of the CSAPR NO_X and the CSAPR SO_2 source shall comply with the requirements of 40 CFR Part 97, Subpart AAAAA for CSAPR NO_X Annual Trading Program, Subpart DDDDD for CSAPR SO_2 Group 2 Trading Program, Subpart EEEEE for CSAPR NO_X Ozone Season Group 2 Trading Program, and with the General Terms and Conditions of the Federal Operating Permit (FOP) that incorporates the CSAPR requirements.

B. Description of CSAPR Monitoring Provisions

(i) The CSAPR subject unit(s), and the unit-specific monitoring provisions at this source, are identified in the following paragraph(s). These unit(s) are subject to the requirements for the CSAPR NO_X Annual Trading Program, CSAPR SO_2 Group 2 Trading Program, and CSAPR NO_X Ozone Season Group 2 Trading Program.

(1) For unit S4MB, the owners and operators shall comply with the continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR Part 75, Subpart B and Subpart H for SO_2, NO_X, and heat input.

(ii) The above description of the monitoring used by a unit does not change, create an exemption from, or otherwise affect the monitoring, recordkeeping, and reporting requirements applicable to the unit under 40 CFR §§ 97.430 through 97.435 (CSAPR NO_X Annual Trading Program), §§ 97.730 through 97.735 (CSAPR SO_2 Group 2 Trading Program), and §§ 97.830 through 97.835 (CSAPR NO_X Ozone Season Group 2 Trading Program). The monitoring, recordkeeping and reporting requirements applicable to each unit are included below in the standard conditions for the applicable CSAPR trading programs.

(iii) Owners and operators must submit to the Administrator a monitoring plan for each unit in accordance with 40 CFR §§ 75.53, 75.62 and 75.73, as applicable. The monitoring plan for each unit is available at the EPA's website at https://www.epa.gov/airmarkets/clean-air-markets-monitoring-plans-part-75-sources.

(iv) Owners and operators that want to use an alternative monitoring system must submit to the Administrator a petition requesting approval of the alternative monitoring system in accordance with 40 CFR Part 75, Subpart E and 40 CFR § 75.66 and § 97.435 (CSAPR NO_X Annual Trading Program), § 97.735 (CSAPR SO_2 Group 2 Trading Program), and/or § 97.835 (CSAPR NO_X Ozone Season Group 2 Trading Program). The Administrator's response approving or disapproving any petition for an alternative monitoring system is available on the EPA's website at https://www.epa.gov/airmarkets/part-75-petition-responses.

(v) Owners and operators that want to use an alternative to any monitoring, recordkeeping, or reporting requirement under 40 CFR §§ 97.430 through 97.434 (CSAPR NO_X Annual Trading Program, §§ 97.730 through 97.734 (CSAPR SO_2 Group 2 Trading Program), and/or §§ 97.830 through 97.834 (CSAPR NO_X Ozone Season Group 2 Trading Program) must submit to the Administrator a petition requesting approval of the alternative in accordance with 40 CFR § 75.66 and § 97.435 (CSAPR NO_X Annual Trading Program), § 97.735 (CSAPR SO_2 Group 2 Trading Program), and/or § 97.835 (CSAPR NO_X Ozone Season Group 2 Trading Program). The Administrator's response approving or disapproving any petition for an alternative to a monitoring, recordkeeping, or reporting requirement is available on the EPA's website at https://www.epa.gov/airmarkets/part-75-petition-responses.

(vi) The descriptions of monitoring applicable to the unit included above meet the requirement of 40 CFR §§ 97.430 through 97.434 (CSAPR NO_X Annual Trading Program), §§ 97.730 through 97.734 (CSAPR SO_2 Group 2 Trading Program), and §§ 97.830 through 97.834 (CSAPR NO_X Ozone Season Group 2 Trading Program), and therefore procedures for minor permit revisions, in accordance with 30 TAC § 122.217, may be used to add or change this unit's monitoring system description.

25. CSAPR NO_X Annual Trading Program Requirements (40 CFR § 97.406)

A. Designated representative requirements

(i) The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR §§ 97.413 through 97.418.

B. Emissions monitoring, reporting, and recordkeeping requirements

(i) The owners and operators, and the designated representative, of each CSAPR NO_x Annual source and each CSAPR NO_x Annual unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR § 97.430 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), § 97.431 (initial monitoring system certification and recertification procedures), § 97.432 (monitoring system out-of-control periods), § 97.433 (notifications concerning monitoring), § 97.434 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and § 97.435 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).

(ii) The emissions data determined in accordance with 40 CFR §§ 97.430 through 97.435 and any other credible evidence shall be used to calculate allocations of CSAPR NO_x Annual allowances under 40 CFR §§ 97.411(a)(2) and (b) and § 97.412 and to determine compliance with the CSAPR NO_x Annual emissions limitation and assurance provisions under paragraph C. below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR §§ 97.430 through 97.435 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

C. NO_x emissions requirements

(i) CSAPR NO_x Annual emissions limitation

(1) As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR NO_x Annual source and each CSAPR NO_x Annual unit at the source shall hold, in the source's compliance account, CSAPR NO_x Annual allowances available for deduction for such control period under 40 CFR § 97.424(a) in an amount not less than the tons of total NO_x emissions for such control period from all CSAPR NO_x Annual units at the source.

(2) If total NO_x emissions during a control period in a given year from the CSAPR NO_x Annual units at a CSAPR NO_x Annual source are in excess of the CSAPR NO_x Annual emissions limitation set forth in paragraph C.(i)(1) above, then:

(a) The owners and operators of the source and each CSAPR NO_x Annual unit at the source shall hold the CSAPR NO_x Annual allowances required for deduction under 40 CFR § 97.424(d); and

(b) The owners and operators of the source and each CSAPR NO_X Annual unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart AAAAA and the Clean Air Act.

(ii) CSAPR NO_X Annual assurance provisions

(1) If total NO_X emissions during a control period in a given year from all CSAPR NO_X Annual units at CSAPR NO_X Annual sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO_X emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR NO_X Annual allowances available for deduction for such control period under 40 CFR § 97.425(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR § 97.425(b), of multiplying—

(a) The quotient of the amount by which the common designated representative's share of such NO_X emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such NO_X emissions exceeds the respective common designated representative's assurance level; and

(b) The amount by which total NO_X emissions from all CSAPR NO_X Annual units at CSAPR NO_X Annual sources in the state for such control period exceed the state assurance level.

(2) The owners and operators shall hold the CSAPR NO_X Annual allowances required under paragraph C.(ii)(1) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.

(3) Total NO_X emissions from all CSAPR NO_X Annual units at CSAPR NO_X Annual sources in the State during a control period in a given year exceed the state assurance level if such total NO_X emissions exceed the sum, for such control period, of the state NO_X Annual trading budget under 40 CFR § 97.410(a) and the state's variability limit under 40 CFR § 97.410(b).

(4) It shall not be a violation of 40 CFR Part 97, Subpart AAAAA or of the Clean Air Act if total NO_x emissions from all CSAPR NO_x Annual units at CSAPR NO_x Annual sources in the State during a control period exceed the state assurance level or if a common designated representative's share of total NO_x emissions from the CSAPR NO_x Annual units at CSAPR NO_x Annual sources in the state during a control period exceeds the common designated representative's assurance level.

(5) To the extent the owners and operators fail to hold CSAPR NO_x Annual allowances for a control period in a given year in accordance with paragraphs C.(ii)(1) through (3) above,

(a) The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and

(b) Each CSAPR NO_x Annual allowance that the owners and operators fail to hold for such control period in accordance with paragraphs C.(ii)(1) through (3) above and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart AAAAA and the Clean Air Act.

(iii) Compliance periods

(1) A CSAPR NO_x Annual unit shall be subject to the requirements under paragraph C.(i) above for the control period starting on the later of January 1, 2015, or the deadline for meeting the unit's monitor certification requirements under 40 CFR § 97.430(b) and for each control period thereafter.

(2) A CSAPR NO_x Annual unit shall be subject to the requirements under paragraph C.(ii) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR § 97.430(b) and for each control period thereafter.

(iv) Vintage of allowances held for compliance

(1) A CSAPR NO_x Annual allowance held for compliance with the requirements under paragraph C.(i)(1) above for a control period in a given year must be a CSAPR NO_x Annual allowance that was allocated for such control period or a control period in a prior year.

(2) A CSAPR NO_x Annual allowance held for compliance with the requirements under paragraphs C.(i)(2)(a) and (ii)(1) through (3) above for a control period in a given year must be a CSAPR NO_x Annual allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.

(v) Allowance Management System requirements. Each CSAPR NO_x Annual allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, Subpart AAAAA.

(vi) Limited authorization. A CSAPR NO_x Annual allowance is a limited authorization to emit one ton of NO_x during the control period in one year. Such authorization is limited in its use and duration as follows:

(1) Such authorization shall only be used in accordance with the CSAPR NO_x Annual Trading Program; and

(2) Notwithstanding any other provision of 40 CFR Part 97, Subpart AAAAA , the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.

(vii) Property right. A CSAPR NO_x Annual allowance does not constitute a property right.

D. FOP revision requirements

(i) No FOP revision shall be required for any allocation, holding, deduction, or transfer of CSAPR NO_x Annual allowances in accordance with 40 CFR Part 97, Subpart AAAAA.

(ii) This FOP incorporates the CSAPR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR §§ 97.430 through 97.435, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR Part 75, subparts B and H), an excepted monitoring system (pursuant to 40 CFR Part 75, appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR § 75.19), and an alternative monitoring system (pursuant to 40 CFR Part 75, subpart E). Therefore, the Description of CSAPR Monitoring Provisions for CSAPR subject unit(s) may be added to, or changed, in this FOP using procedures for minor permit revisions in accordance with 30 TAC § 122.217.

E. Additional recordkeeping and reporting requirements

(i) Unless otherwise provided, the owners and operators of each CSAPR NO_x Annual source and each CSAPR NO_x Annual unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.

(1) The certificate of representation under 40 CFR § 97.416 for the designated representative for the source and each CSAPR NO_x Annual unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate

of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR § 97.416 changing the designated representative.

(2) All emissions monitoring information, in accordance with 40 CFR Part 97, Subpart AAAAA.

(3) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR NO_X Annual Trading Program.

(ii) The designated representative of a CSAPR NO_X Annual source and each CSAPR NO_X Annual unit at the source shall make all submissions required under the CSAPR NO_X Annual Trading Program, except as provided in 40 CFR § 97.418. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under 30 TAC § 122.165.

F. Liability

(i) Any provision of the CSAPR NO_X Annual Trading Program that applies to a CSAPR NO_X Annual source or the designated representative of a CSAPR NO_X Annual source shall also apply to the owners and operators of such source and of the CSAPR NO_X Annual units at the source.

(ii) Any provision of the CSAPR NO_X Annual Trading Program that applies to a CSAPR NO_X Annual unit or the designated representative of a CSAPR NO_X Annual unit shall also apply to the owners and operators of such unit.

G. Effect on other authorities

(i) No provision of the CSAPR NO_X Annual Trading Program or exemption under 40 CFR § 97.405 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR NO_X Annual source or CSAPR NO_X Annual unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

26. CSAPR SO_2 Group 2 Trading Program Requirements (40 CFR § 97.706)

A. Designated representative requirements

(i) The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR §§ 97.713 through 97.718.

B. Emissions monitoring, reporting, and recordkeeping requirements

(i) The owners and operators, and the designated representative, of each CSAPR SO_2 Group 2 source and each CSAPR SO_2 Group 2 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR § 97.730 (general requirements, including

installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), § 97.731 (initial monitoring system certification and recertification procedures), § 97.732 (monitoring system out-of-control periods), §97.733 (notifications concerning monitoring), §97.734 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and § 97.735 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).

(ii) The emissions data determined in accordance with 40 CFR § 97.730 through § 97.735 and any other credible evidence shall be used to calculate allocations of CSAPR SO_2 Group 2 allowances under 40 CFR §§ 97.711(a)(2) and (b) and § 97.712 and to determine compliance with the CSAPR SO_2 Group 2 emissions limitation and assurance provisions under paragraph C. below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR §§ 97.730 through 97.735 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

C. SO_2 emissions requirements

(i) CSAPR SO_2 Group 2 emissions limitation

(1) As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR SO_2 Group 2 source and each CSAPR SO_2 Group 2 unit at the source shall hold, in the source's compliance account, CSAPR SO_2 Group 2 allowances available for deduction for such control period under 40 CFR § 97.724(a) in an amount not less than the tons of total SO_2 emissions for such control period from all CSAPR SO_2 Group 2 units at the source.

(2) If total SO_2 emissions during a control period in a given year from the CSAPR SO_2 Group 2 units at a CSAPR SO_2 Group 2 source are in excess of the CSAPR SO_2 Group 2 emissions limitation set forth in paragraph C.(i)(1) above, then:

(a) The owners and operators of the source and each CSAPR SO_2 Group 2 unit at the source shall hold the CSAPR SO_2 Group 2 allowances required for deduction under 40 CFR § 97.724(d); and

(b) The owners and operators of the source and each CSAPR SO_2 Group 2 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart DDDDD and the Clean Air Act.

(ii) CSAPR SO_2 Group 2 assurance provisions

(1) If total SO_2 emissions during a control period in a given year from all CSAPR SO_2 Group 2 units at CSAPR SO_2 Group 2 sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such SO_2 emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR SO_2 Group 2 allowances available for deduction for such control period under 40 CFR § 97.725(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR § 97.725(b), of multiplying—

(a) The quotient of the amount by which the common designated representative's share of such SO_2 emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such SO_2 emissions exceeds the respective common designated representative's assurance level; and

(b) The amount by which total SO_2 emissions from all CSAPR SO_2 Group 2 units at CSAPR SO_2 Group 2 sources in the state for such control period exceed the state assurance level.

(2) The owners and operators shall hold the CSAPR SO_2 Group 2 allowances required under paragraph C.(ii)(1) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.

(3) Total SO_2 emissions from all CSAPR SO_2 Group 2 units at CSAPR SO_2 Group 2 sources in the state during a control period in a given year exceed the state assurance level if such total SO_2 emissions exceed the sum, for such control period, of the state SO_2 Group 2 trading budget under 40 CFR § 97.710(a) and the state's variability limit under 40 CFR § 97.710(b).

(4) It shall not be a violation of 40 CFR Part 97, Subpart DDDDD or of the Clean Air Act if total SO_2 emissions from all CSAPR SO_2 Group 2 units at CSAPR SO_2 Group 2 sources in the state during a control period exceed the state assurance level or if a common designated representative's share of total SO_2 emissions from the CSAPR SO_2 Group 2 units at CSAPR SO_2 Group 2 sources in the state during a control period exceeds the common designated representative's assurance level.

(5) To the extent the owners and operators fail to hold CSAPR SO_2 Group 2 allowances for a control period in a given year in accordance with paragraphs C.(ii)(1) through (3) above,

(a) The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and

(b) Each CSAPR SO_2 Group 2 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs C.(ii)(1) through (3) above and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart DDDDD and the Clean Air Act.

(iii) Compliance periods

(1) A CSAPR SO_2 Group 2 unit shall be subject to the requirements under paragraph C.(i) above for the control period starting on the later of January 1, 2015 or the deadline for meeting the unit's monitor certification requirements under 40 CFR § 97.730(b) and for each control period thereafter.

(2) A CSAPR SO_2 Group 2 unit shall be subject to the requirements under paragraph C.(ii) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR § 97.730(b) and for each control period thereafter.

(iv) Vintage of allowances held for compliance

(1) A CSAPR SO_2 Group 2 allowance held for compliance with the requirements under paragraph C.(i)(1) above for a control period in a given year must be a CSAPR SO_2 Group 2 allowance that was allocated for such control period or a control period in a prior year.

(2) A CSAPR SO_2 Group 2 allowance held for compliance with the requirements under paragraphs C.(i)(2)(a) and (ii)(1) through (3) above for a control period in a given year must be a CSAPR SO_2 Group 2 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.

(v) Allowance Management System requirements. Each CSAPR SO_2 Group 2 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, Subpart DDDDD.

(vi) Limited authorization. A CSAPR SO_2 Group 2 allowance is a limited authorization to emit one ton of SO_2 during the control period in one year. Such authorization is limited in its use and duration as follows:

(1) Such authorization shall only be used in accordance with the CSAPR SO_2 Group 2 Trading Program; and

(2) Notwithstanding any other provision of 40 CFR Part 97, Subpart DDDDD, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.

(vii) Property right. A CSAPR SO_2 Group 2 allowance does not constitute a property right.

D. FOP revision requirements

(i) No FOP revision shall be required for any allocation, holding, deduction, or transfer of CSAPR SO_2 Group 2 allowances in accordance with 40 CFR Part 97, Subpart DDDDD.

(ii) This FOP incorporates the CSAPR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR §§ 97.730 through 97.735, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR Part 75, subparts B and H), an excepted monitoring system (pursuant to 40 CFR Part 75, appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR § 75.19), and an alternative monitoring system (pursuant to 40 CFR Part 75, subpart E). Therefore the Description of CSAPR Monitoring Provisions for CSAPR subject unit(s) may be added to, or changed, in this FOP using procedures for minor permit revisions in accordance with 30 TAC § 122.217.

E. Additional recordkeeping and reporting requirements

(i) Unless otherwise provided, the owners and operators of each CSAPR SO_2 Group 2 source and each CSAPR SO_2 Group 2 unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.

(1) The certificate of representation under 40 CFR § 97.716 for the designated representative for the source and each CSAPR SO_2 Group 2 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR § 97.716 changing the designated representative.

(2) All emissions monitoring information, in accordance with 40 CFR Part 97, Subpart DDDDD.

(3) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to

demonstrate compliance with the requirements of, the CSAPR SO_2 Group 2 Trading Program.

(ii) The designated representative of a CSAPR SO_2 Group 2 source and each CSAPR SO_2 Group 2 unit at the source shall make all submissions required under the CSAPR SO_2 Group 2 Trading Program, except as provided in 40 CFR § 97.718. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under 30 TAC § 122.165.

F. Liability

(i) Any provision of the CSAPR SO_2 Group 2 Trading Program that applies to a CSAPR SO_2 Group 2 source or the designated representative of a CSAPR SO_2 Group 2 source shall also apply to the owners and operators of such source and of the CSAPR SO_2 Group 2 units at the source.

(ii) Any provision of the CSAPR SO_2 Group 2 Trading Program that applies to a CSAPR SO_2 Group 2 unit or the designated representative of a CSAPR SO_2 Group 2 unit shall also apply to the owners and operators of such unit.

G. Effect on other authorities

(i) No provision of the CSAPR SO_2 Group 2 Trading Program or exemption under 40 CFR § 97.705 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR SO_2 Group 2 source or CSAPR SO_2 Group 2 unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

27. CSAPR NO_X Ozone Season Group 2 Trading Program Requirements (40 CFR § 97.806)

A. Designated representative requirements

(i) The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR §§ 97.813 through 97.818.

B. Emissions monitoring, reporting, and recordkeeping requirements

(i) The owners and operators, and the designated representative, of each CSAPR NO_X Ozone Season Group 2 source and each CSAPR NO_X Ozone Season Group 2 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR § 97.830 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), § 97.831 (initial monitoring system certification and recertification procedures), § 97.832 (monitoring system out-of-control periods), § 97.833 (notifications concerning monitoring), §97.834 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and § 97.835 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).

(ii) The emissions data determined in accordance with 40 CFR § 97.830 through § 97.835 and any other credible evidence shall be used to calculate allocations of CSAPR NO_x Ozone Season Group 2 allowances under 40 CFR §§ 97.811 (a)(2) and (b) and § 97.812 and to determine compliance with the CSAPR NO_x Ozone Season Group 2 emissions limitation and assurance provisions under paragraph C. below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR §§ 97.830 through 97.835 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

C. NO_x emissions requirements

(i) CSAPR NO_x Ozone Season Group 2 emissions limitation

(1) As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR NO_x Ozone Season Group 2 source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall hold, in the source's compliance account, CSAPR NO_x Ozone Season Group 2 allowances available for deduction for such control period under 40 CFR § 97.824 (a) in an amount not less than the tons of total NO_x emissions for such control period from all CSAPR NO_x Ozone Season Group 2 units at the source.

(2) If total NO_x emissions during a control period in a given year from the CSAPR NO_x Ozone Season Group 2 units at a CSAPR NO_x Ozone Season Group 2 source are in excess of the CSAPR NO_x Ozone Season Group 2 emissions limitation set forth in paragraph C.(i)(1) above, then:

(a) The owners and operators of the source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall hold the CSAPR NO_x Ozone Season Group 2 allowances required for deduction under 40 CFR § 97.824 (d); and

(b) The owners and operators of the source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart EEEEE and the Clean Air Act.

(ii) CSAPR NO_x Ozone Season Group 2 assurance provisions

(1) If total NO_x emissions during a control period in a given year from all CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common

designated representative for such control period, where the common designated representative's share of such NO_x emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR NO_x Ozone Season Group 2 allowances available for deduction for such control period under 40 CFR § 97.825 (a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR § 97.825 (b), of multiplying—

(a) The quotient of the amount by which the common designated representative's share of such NO_x emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such NO_x emissions exceeds the respective common designated representative's assurance level; and

(b) The amount by which total NO_x emissions from all CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in the state for such control period exceed the state assurance level.

(2) The owners and operators shall hold the CSAPR NO_x Ozone Season Group 2 allowances required under paragraph C.(ii)(1) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.

(3) Total NO_x emissions from all CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in the state during a control period in a given year exceed the state assurance level if such total NO_x emissions exceed the sum, for such control period, of the state NO_x Ozone Season Group 2 trading budget under 40 CFR § 97.810 (a) and the state's variability limit under 40 CFR § 97.810 (b).

(4) It shall not be a violation of 40 CFR Part 97, Subpart EEEEE or of the Clean Air Act if total NO_x emissions from all CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in the state during a control period exceed the state assurance level or if a common designated representative's share of total NO_x emissions from the CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in the state during a control period exceeds the common designated representative's assurance level.

(5) To the extent the owners and operators fail to hold CSAPR NO_x Ozone Season Group 2 allowances for a control period in a given year in accordance with paragraphs C.(ii)(1) through (3) above,

(a) The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and

(b) Each CSAPR NO_x Ozone Season Group 2 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs C.(ii)(1) through (3) above and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart EEEEE and the Clean Air Act.

(iii) Compliance periods

(1) A CSAPR NO_x Ozone Season Group 2 unit shall be subject to the requirements under paragraph C.(i) above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR § 97.830 (b) and for each control period thereafter.

(2) A CSAPR NO_x Ozone Season Group 2 unit shall be subject to the requirements under paragraph C.(ii) above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR § 97.830 (b) and for each control period thereafter.

(iv) Vintage of allowances held for compliance

(1) A CSAPR NO_x Ozone Season Group 2 allowance held for compliance with the requirements under paragraph C.(i)(1) above for a control period in a given year must be a CSAPR NO_x Ozone Season Group 2 allowance that was allocated for such control period or a control period in a prior year.

(2) A CSAPR NO_x Ozone Season Group 2 allowance held for compliance with the requirements under paragraphs C.(i)(2)(a) and (ii)(1) through (3) above for a control period in a given year must be a CSAPR NO_x Ozone Season Group 2 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.

(v) Allowance Management System requirements. Each CSAPR NO_x Ozone Season Group 2 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, Subpart EEEEE.

(vi) Limited authorization. A CSAPR NO_x Ozone Season Group 2 allowance is a limited authorization to emit one ton of NO_x during the control period in one year. Such authorization is limited in its use and duration as follows:

(1) Such authorization shall only be used in accordance with the CSAPR NO_x Ozone Season Group 2 Trading Program; and

(2) Notwithstanding any other provision of 40 CFR Part 97, Subpart EEEEE, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.

(vii) Property right. A CSAPR NO_x Ozone Season Group 2 allowance does not constitute a property right.

D. FOP revision requirements

(i) No FOP revision shall be required for any allocation, holding, deduction, or transfer of CSAPR NO_x Ozone Season Group 2 allowances in accordance with 40 CFR Part 97, Subpart EEEEE.

(ii) This FOP incorporates the CSAPR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR §§ 97.830 through 97.835, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR Part 75, subpart H), an excepted monitoring system (pursuant to 40 CFR Part 75, appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR § 75.19), and an alternative monitoring system (pursuant to 40 CFR Part 75, subpart E). Therefore the Description of CSAPR Monitoring Provisions for CSAPR subject unit(s) may be added to, or changed, in this FOP using procedures for minor permit revisions in accordance with 30 TAC § 122.217.

E. Additional recordkeeping and reporting requirements

(i) Unless otherwise provided, the owners and operators of each CSAPR NO_x Ozone Season Group 2 source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.

(1) The certificate of representation under 40 CFR § 97.816 for the designated representative for the source and each CSAPR NO_x Ozone Season Group 2 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR § 97.816 changing the designated representative.

(2) All emissions monitoring information, in accordance with 40 CFR Part 97, Subpart EEEEE.

(3) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR NO_x Ozone Season Group 2 Trading Program.

(ii) The designated representative of a CSAPR NO_x Ozone Season Group 2 source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall make all submissions required under the CSAPR NO_x Ozone Season Group 2 Trading Program, except as provided in 40 CFR § 97.818. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under 30 TAC § 122.165.

F. Liability

(i) Any provision of the CSAPR NO_x Ozone Season Group 2 Trading Program that applies to a CSAPR NO_x Ozone Season Group 2 source or the designated representative of a CSAPR NO_x Ozone Season Group 2 source shall also apply to the owners and operators of such source and of the CSAPR NO_x Ozone Season Group 2 units at the source.

(ii) Any provision of the CSAPR NO_x Ozone Season Group 2 Trading Program that applies to a CSAPR NO_x Ozone Season Group 2 unit or the designated representative of a CSAPR NO_x Ozone Season Group 2 unit shall also apply to the owners and operators of such unit.

G. Effect on other authorities

H. No provision of the CSAPR NO_x Ozone Season Group 2 Trading Program or exemption under 40 CFR § 97.805 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR NO_x Ozone Season Group 2 source or CSAPR NO_x Ozone Season Group 2 unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

Attachments

Applicable Requirements Summary

Additional Monitoring Requirements

New Source Review Authorization References

Applicable Requirements Summary

Note: A "none" entry may be noted for some emission sources in this permit's "Applicable Requirements Summary" under the heading of "Monitoring and Testing Requirements" and/or "Recordkeeping Requirements" and/or "Reporting Requirements." Such a notation indicates that there are no requirements for the indicated emission source as identified under the respective column heading(s) for the stated portion of the regulation when the emission source is operating under the conditions of the specified SOP Index Number. However, other relevant requirements pursuant to 30 TAC Chapter 122 including Recordkeeping Terms and Conditions (30 TAC § 122.144), Reporting Terms and Conditions (30 TAC § 122.145), and Compliance Certification Terms and Conditions (30 TAC § 122.146) continue to apply.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
GRPAUX	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	S4SB-E, S4SB-W	R112-2	30 TAC Chapter 112, Sulfur Compounds	No changing attributes.
GRPAUX	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	S4SB-E, S4SB-W	63DDDDD-1	40 CFR Part 63, Subpart DDDDD	No changing attributes.
GRPCHS	COAL PREPARATION PLANTS	L10STH, L1TT1, L2CB, L6UR, L7TT2, L8TT3, L8TT3-1PS, L8TT3-2PSF, L8TT3-3SC, L8TT3-4SSF, L8TT3-5SS, L9NTH, L9TT4	60Y-1	40 CFR Part 60, Subpart Y	No changing attributes.
S01	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R111-2	30 TAC Chapter 111, Visible Emissions	No changing attributes.
S03	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R111-1	30 TAC Chapter 111, Visible Emissions	No changing attributes.
S4FD	SRIC ENGINES	N/A	63ZZZZ	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
S4MB	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	N/A	R1111-1	30 TAC Chapter 111, Nonagricultural Processes	No changing attributes.
S4MB	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	N/A	R112-1	30 TAC Chapter 112, Sulfur Compounds	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
S4MB	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	N/A	R117-1	30 TAC Chapter 117, Subchapter E, Division 1	No changing attributes.
S4MB	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	N/A	60D-1	40 CFR Part 60, Subpart D	No changing attributes.
S4MB	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	N/A	63UUUUU-1	40 CFR Part 63, Subpart UUUUU	No changing attributes.

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRPAUX	EU	R112-2	SO2	30 TAC Chapter 112, Sulfur Compounds	§ 112.9(a)	No person may cause, suffer, allow, or permit emissions of SO2 from any liquid fuel-fired steam generator, furnace, or heater to exceed 440 ppmv at actual stack conditions and averaged over 3-hours.	§ 112.2(a) ** See Periodic Monitoring Summary	§ 112.2(c)	§ 112.2(b)
GRPAUX	EU	63DDDDD-1	112(B) HAPS	40 CFR Part 63, Subpart DDDDD	§ 63.7505 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart DDDDD

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRPCHS	EU	60Y-1	PM (OPACITY)	40 CFR Part 60, Subpart Y	§ 60.254(a)	On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal constructed, reconstructed, or modified on or before April 28, 2008, gases which exhibit 20 percent opacity or greater.	§ 60.255(a) [G]§ 60.257(a) ** See Periodic Monitoring Summary	None	None
S01	EP	R111-2	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
S03	EP	R111-1	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(B) § 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 20% averaged over a six minute period for any source on which construction was begun after January 31, 1972.	§ 111.111(a)(1)(D) [G]§ 111.111(a)(1)(F)	§ 111.111(a)(1)(C) § 111.111(a)(1)(D)	None
S4FD	EU	63ZZZZ	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6602-Table2c.1 § 63.6595(a)(1) § 63.6605(a) § 63.6605(b) § 63.6625(e) § 63.6625(h) § 63.6625(i) § 63.6640(f)(1) § 63.6640(f)(2) § 63.6640(f)(2)(i) § 63.6640(f)(3)	For each existing emergency stationary CI RICE and black start stationary CI RICE, located at a major source, you must comply with the requirements as specified in Table 2c.1.a-c.	§ 63.6625(f) § 63.6625(i) § 63.6640(a) § 63.6640(a)-Table6.9.a.i § 63.6640(a)-Table6.9.a.ii § 63.6640(b)	§ 63.6625(i) § 63.6655(a) § 63.6655(a)(1) § 63.6655(d) § 63.6655(e) § 63.6655(f) § 63.6660(a) § 63.6660(b) § 63.6660(c)	§ 63.6640(b) § 63.6640(e) § 63.6650(f)
S4MB	EU	R1111-1	PM	30 TAC Chapter 111, Nonagricultural Processes	§ 111.153(b) § 111.153(a)	No person may cause, suffer, allow, or permit emissions of particulate matter from any solid fossil fuel-fired steam generator to exceed 0.3 pound of total suspended particulate per million Btu heat input, averaged over a two-hour period.	** See CAM Summary	None	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
S4MB	EU	R112-1	SO2	30 TAC Chapter 112, Sulfur Compounds	§ 112.8(a)	Except as in §112.8(b), no person may cause, suffer, allow, or permit emissions ofSO2 from solid fossil fuel-fired steam generators to exceed 3.0 lb/MMBtu heat input averaged over a 3-hour period.	§ 112.2(a) § 112.8(d) ** See CAM Summary	§ 112.2(c)	§ 112.2(b)
S4MB	EU	R117-1	NO_x	30 TAC Chapter 117, Subchapter E, Division 1	§ 117.3020(c) § 117.3020(a) § 117.3020(b) § 117.3020(d) § 117.3020(e) § 117.3020(i) § 117.3020(j) § 117.3020(k) § 117.3020(l)	The annual average emission cap shall be calculated using the following equation.	§ 117.3020(d) § 117.3020(e) [G]§ 117.3020(e)(1) § 117.3020(h) § 117.3020(k) § 117.3040(a) § 117.3040(d) § 117.3040(d)(1) [G]§ 117.3040(d)(2) [G]§ 117.3040(d)(3) § 117.3040(h) § 117.3040(h)(1)	§ 117.3020(f) § 117.3045(a) [G]§ 117.3045(e)	§ 117.3020(g) § 117.3045(b) § 117.3045(b)(1) § 117.3045(b)(2) [G]§ 117.3045(c) [G]§ 117.3045(d) [G]§ 117.3054(a) [G]§ 117.3054(b) § 117.3054(c) § 117.3056

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
S4MB	EU	R117-1	NH_3	30 TAC Chapter 117, Subchapter E, Division 1	§ 117.3010(2) § 117.3010 § 117.3010(2)(B) § 117.3040(k)	In accordance with the compliance schedule in §117.9300 of this title, the owner or operator of each utility electric power boiler shall ensure that for units which inject urea or ammonia into the exhaust stream for NOx control, ammonia emissions do not exceed 10 ppmv at 3.0% O2, dry, for boilers subject to the NOx emission limits specified in paragraph (1) of this section.	§ 117.3035(a) § 117.3035(a)(2) § 117.3035(a)(3) § 117.3035(c) § 117.3040(c) § 117.3040(d) § 117.3040(d)(1) [G]§ 117.3040(d)(2) § 117.3040(h) § 117.3040(h)(1)	§ 117.3045(a) [G]§ 117.3045(e)	§ 117.3035(b) § 117.3045(b) § 117.3045(b)(1) § 117.3045(b)(2) [G]§ 117.3045(c) [G]§ 117.3045(d) § 117.3054(a) § 117.3054(a)(3) § 117.3054(a)(4) § 117.3054(c) § 117.3056
S4MB	EU	60D-1	PM	40 CFR Part 60, Subpart D	§ 60.42(a)(1)	On/after the §60.8 tests, no affected facility shall emit gases containing particulate matter in excess of 43 ng/J heat input (0.10 lb/MMBtu) derived from fossil fuel or fossil fuel and wood residue.	§ 60.46(a) § 60.46(b)(1) [G]§ 60.46(b)(2) [G]§ 60.46(d)(1) § 60.46(d)(2) [G]§ 60.46(d)(3) § 60.46(d)(6) § 60.46(d)(7) ** See CAM Summary	None	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
S4MB	EU	60D-1	PM (OPACITY)	40 CFR Part 60, Subpart D	§ 60.42(a)(2)	On/after the performance tests of §60.8, no affected facility shall emit gases exhibiting greater than 20% opacity except for one six-minute period per hour of not more than 27% opacity.	§ 60.45(a) § 60.45(c) § 60.45(c)(3) § 60.45(g) § 60.45(g)(1) § 60.46(a) § 60.46(b)(3) ** See CAM Summary	None	§ 60.45(g)
S4MB	EU	60D-1	SO_2	40 CFR Part 60, Subpart D	§ 60.43(a)(2)	On/after the §60.8 tests, no affected facility shall emit gases containing SO2 in excess of 520 ng/J heat input (1.2 lb/MMBtu) derived from solid fossil fuel or solid fossil fuel and wood residue.	§ 60.45(a) § 60.45(c) § 60.45(c)(1) § 60.45(c)(2) § 60.45(c)(3) § 60.45(c)(3)(i) § 60.45(c)(3)(ii) [G]§ 60.45(e) [G]§ 60.45(f) § 60.45(g) § 60.45(g)(2)(i) § 60.46(a) § 60.46(b)(1) [G]§ 60.46(b)(4) § 60.46(d) [G]§ 60.46(d)(1) [G]§ 60.46(d)(3) § 60.46(d)(4) § 60.46(d)(6) § 60.46(d)(7) ** See CAM Summary	None	§ 60.45(g)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
S4MB	EU	60D-1	NO_x	40 CFR Part 60, Subpart D	§ 60.44(a)(4)	On/after the §60.8 tests, no affected facility shall emit gases containing NOx, expressed as NO2, in excess of 260 ng/J heat input (0.60 lb/MMBtu) derived from the specified fuels.	§ 60.45(a) § 60.45(b)(3) § 60.45(c) § 60.45(c)(1) § 60.45(c)(2) § 60.45(c)(3) § 60.45(c)(3)(i) § 60.45(c)(3)(ii) [G]§ 60.45(e) [G]§ 60.45(f) § 60.45(g) § 60.45(g)(3) § 60.45(g)(3)(i) § 60.46(a) § 60.46(b)(1) [G]§ 60.46(b)(5) § 60.46(d) [G]§ 60.46(d)(1) § 60.46(d)(5) § 60.46(d)(6) § 60.46(d)(7)	None	§ 60.45(g)
S4MB	EU	63UUUUU-1	112(B) HAPS	40 CFR Part 63, Subpart UUUUU	§ 63.9981 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart UUUUU	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart UUUUU	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart UUUUU	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart UUUUU	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart UUUUU

Additional Monitoring Requirements

CAM Summary

Unit/Group/Process Information	
ID No.: S4MB	
Control Device ID No.: S4EP	Control Device Type: Wet or Dry Electrostatic Precipitator
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Nonagricultural Processes	SOP Index No.: R1111-1
Pollutant: PM	Main Standard: § 111.153(b)
Monitoring Information	
Indicator: Opacity	
Minimum Frequency: 6 times per minute	
Averaging Period: 2 hour block	
Deviation Limit: Maximum opacity = 20%	
CAM Text: The continuous opacity monitoring system (COMS) shall be operated in accordance with the requirements, including schedules of 40 CFR 60.13 and 40 CFR Part 60, Appendix B. The COMS shall take six 10-second readings per minute and record a six-minute average opacity. The six minute average values will then be averaged over a 2 hour block. The 2 hour block will start at the beginning of each clock hour of the day and end at the second clock hour (i.e. 0000-0200, 0200-0400, etc.). If the opacity exceeds 20% averaged over the 2 hour block period, it shall be considered and reported as a deviation. A valid 2 hour block shall consist of at least 19 of the 20 six minute readings (95%) that the boiler is in operation. Monitoring data shall not be included in the two-hour block average during periods of monitoring malfunctions, associated repairs, and required quality assurance or control activities as specified in 40 CFR64.7(c).	

CAM Summary

Unit/Group/Process Information	
ID No.: S4MB	
Control Device ID No.: S4SO2S	Control Device Type: Wet Scrubber
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 112, Sulfur Compounds	SOP Index No.: R112-1
Pollutant: SO_2	Main Standard: § 112.8(a)
Monitoring Information	
Indicator: SO_2 concentration	
Minimum Frequency: Permit holder will collect at least four data values equally spaced over each hour, as required by 40 CFR §64.3(b)(4)(ii).*	
Averaging Period: 3 hours	
Deviation Limit: SO_2 emissions not to exceed 3.0 lb/MMBtu heat input	
CAM Text: The CEMS shall be operated in accordance with 40 CFR Part 75 and Performance Specifications of 40 CFR Part 75. The CEMS shall be located, installed and operated in accordance with 40 CFR Part 75 and Performance Specifications of 40 CFR Part 75. When converting CEMS measurements of SO_2 concentration (ppm) and diluent concentration (percentage) into SO_2 emission rates in lb/MMBtu, a minimum concentration of 5.0 percent CO_2 or a maximum concentration of 14.0 percent O_2 may be substituted for the measured diluent gas concentration value for any operating hour in which the hourly average CO_2 concentration is < 5.0 percent CO_2 or the hourly average O_2 concentration is > 14.0 percent O_2. As required by 40 CFR §64.3(b)(2), if the permit holder modifies existing monitoring equipment used for CAM purposes or installs new monitoring equipment used for CAM purposes, the permit holder will verify the operational status of the monitoring equipment in accordance with 40 CFR Part 75 and Performance Specifications of 40 CFR Part 75.	

*The permit holder may elect to collect data on a more frequent basis provided that the additional data is collected on a regular basis and is not used to avoid reporting deviations in particular instances.

CAM Summary

Unit/Group/Process Information	
ID No.: S4MB	
Control Device ID No.: S4EP	Control Device Type: Wet or Dry Electrostatic Precipitator
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart D	SOP Index No.: 60D-1
Pollutant: PM	Main Standard: § 60.42(a)(1)
Monitoring Information	
Indicator: Opacity	
Minimum Frequency: Six times per minute	
Averaging Period: Six minutes	
Deviation Limit: Maximum 20% opacity except for one six-minute period per hour of not more than 27% opacity.	
CAM Text: The QA/QC procedures will be implemented in accordance with 40 CFR 60.13. The COMS is located, installed and operated in accordance with 40 CFR 60.13. The deviation limit does not apply during periods of startup, shutdown, and malfunction, during which 60.11(c) provides that the opacity standard is not applicable. As required by 40 CFR 64.3(b)(2), if the permit holder modifies existing monitoring equipment used for CAM purposes or installs new monitoring equipment used for CAM purposes, permit holder shall verify the operational status of the monitoring status of the monitoring equipment in accordance with 40 CFR 60.13.	

CAM Summary

Unit/Group/Process Information	
ID No.: S4MB	
Control Device ID No.: S4EP	Control Device Type: Wet or Dry Electrostatic Precipitator
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart D	SOP Index No.: 60D-1
Pollutant: PM (OPACITY)	Main Standard: § 60.42(a)(2)
Monitoring Information	
Indicator: Opacity	
Minimum Frequency: Six times per minute	
Averaging Period: Six minutes	
Deviation Limit: Maximum 20% opacity except for one six-minute period per hour of not more than 27% opacity.	
CAM Text: The QA/QC procedures will be implemented in accordance with 40 CFR 60.13. The COMS is located, installed and operated in accordance with 40 CFR 60.13. The deviation limit does not apply during periods of startup, shutdown, and malfunction, during which 60.11(c) provides that the opacity standard is not applicable. As required by 40 CFR 64.3(b)(2), if the permit holder modifies existing monitoring equipment used for CAM purposes or installs new monitoring equipment used for CAM purposes, permit holder shall verify the operational status of the monitoring status of the monitoring equipment in accordance with 40 CFR 60.13.	

CAM Summary

Unit/Group/Process Information	
ID No.: S4MB	
Control Device ID No.: S4SO2S	Control Device Type: Wet Scrubber
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart D	SOP Index No.: 60D-1
Pollutant: SO_2	Main Standard: § 60.43(a)(2)
Monitoring Information	
Indicator: SO2 concentration	
Minimum Frequency: At least four data values equally spaced over each hour.	
Averaging Period: 3 hours	
Deviation Limit: SO2 emissions not to exceed 1.2 lb/MMBtu heat input, averaged over a 3-hour period.	
CAM Text: The CEMS shall be operated in accordance with 40 CFR 60.13 and 60.45. The CEMS shall be located, installed and operated in accordance with 40 CFR 60.13 and 60.45. As required by 40 CFR 64.3(b)(2), if the permit holder modifies existing monitoring equipment used for CAM purposes or installs new monitoring equipment used for cam purposes, the permit holder shall verify the operational status of the monitoring equipment in accordance with 40 CFR 60.13 and 60.45.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRPAUX	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 112, Sulfur Compounds	SOP Index No.: R112-2
Pollutant: SO2	Main Standard: § 112.9(a)
Monitoring Information	
Indicator: Fuel sulfur content	
Minimum Frequency: Annually	
Averaging Period: n/a	
Deviation Limit: Maximum 0.7% sulfur, by weight	
Periodic Monitoring Text: Maintain fuel usage and sulfur content records to demonstrate that only fuel oil containing <0.7% sulfur is burned in the unit.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRPCHS	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart Y	SOP Index No.: 60Y-1
Pollutant: PM (OPACITY)	Main Standard: § 60.254(a)
Monitoring Information	
Indicator: Opacity	
Minimum Frequency: Once per month	
Averaging Period: Six-minutes	
Deviation Limit: Maximum opacity = 20%	
Periodic Monitoring Text: Opacity shall be monitored, by a certified observer, for at least one, six-minute period in accordance with Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Appendix A, Test Method 9. Any opacity readings above the deviation limit shall be reported as a deviation.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: S01	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R111-2
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Opacity	
Minimum Frequency: Monthly	
Averaging Period: Six minutes	
Deviation Limit: Opacity > 15% opacity	
Periodic Monitoring Text: Conduct an opacity test in accordance with 40 CFR Part 60, Appendix A, Test Method 9 once per month, when the stack is operational. Any opacity readings above the deviation limit shall be reported as a deviation.	

New Source Review Authorization References

New Source Review Authorization References

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Prevention of Significant Deterioration (PSD) Permits	
PSD Permit No.: PSDTX28M1	Issuance Date: 02/17/2017
Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 108271	Issuance Date: 03/04/2013
Authorization No.: 125855	Issuance Date: 10/28/2016
Authorization No.: 45425	Issuance Date: 06/22/2012
Authorization No.: 4980	Issuance Date: 02/17/2017
Authorization No.: 5473	Issuance Date: 03/25/2015
Authorization No.: 87633	Issuance Date: 03/19/2009
Authorization No.: 97146	Issuance Date: 07/21/2011
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.144	Version No./Date: 09/04/2000
Number: 106.227	Version No./Date: 09/04/2000
Number: 106.261	Version No./Date: 03/14/1997
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.264	Version No./Date: 09/04/2000
Number: 106.412	Version No./Date: 09/04/2000
Number: 106.433	Version No./Date: 09/04/2000
Number: 106.452	Version No./Date: 03/14/1997
Number: 106.452	Version No./Date: 09/04/2000
Number: 106.454	Version No./Date: 11/01/2001
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.511	Version No./Date: 09/04/2000
Number: 106.532	Version No./Date: 09/04/2000
Number: 5	Version No./Date: 05/12/1981
Number: 58	Version No./Date: 05/05/1976

New Source Review Authorization References

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Number: 58	Version No./Date: 05/12/1981

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
L10STH	UNIT 4 SOUTH LIGNITE TRIPPER HOUSE	5473
L1TT1	TRANSFER TOWER 1	5473, 87633, 106.262/11/01/2003
L2CB	CONVEYOR 41 TO 42	5473, 87633, 106.262/11/01/2003
L6UR	STACKOUT LIGNITE UNDERGROUND RECLAIM HOPPER	108271, 5473
L7TT2	TRANSFER TOWER LIGNITE CRUSHER/BOILER SURGE BIN	5473, 106.262/11/01/2003
L8TT3-1PS	PRIMARY SAMPLER	108271, 106.262/11/01/2003
L8TT3-2PSF	PRIMARY SAMPLE FEEDER	108271, 106.262/11/01/2003
L8TT3-3SC	SAMPLE CRUSHER	108271, 106.262/11/01/2003
L8TT3-4SSF	SECONDARY SAMPLE FEEDER	108271, 106.262/11/01/2003
L8TT3-5SS	SECONDARY SAMPLER	108271, 106.262/11/01/2003
L8TT3	TT#3 LIGNITE SURGE BIN/S. BIN TO CONVEYORS 44A&B	108271, 5473
L9NTH	UNIT 4 NORTH LIGNITE TRIPPER HOUSE	5473
L9TT4	LIGNITE TRANSFER TOWER 4	5473
S01	UNIT 4 STARTUP BOILER EAST & WEST COMMON STACK	4980, PSDTX28M1
S03	UNIT 4 BOILER STACK	45425, 4980, 97146, PSDTX28M1
S4FD	DIESEL EMERGENCY FIRE WATER PUMP	005/05/12/1981
S4MB	UNIT 4 BOILER	45425, 4980, 97146, PSDTX28M1
S4SB-E	UNIT 4 STARTUP BOILER EAST	4980, PSDTX28M1

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
S4SB-W	UNIT 4 STARTUP BOILER WEST	4980, PSDTX28M1

Appendix A

Acronym List

The following abbreviations or acronyms may be used in this permit:

ACFM ..... actual cubic feet per minute
AMOC ..... alternate means of control
ARP ..... Acid Rain Program
ASTM ..... American Society of Testing and Materials
B/PA ..... Beaumont/Port Arthur (nonattainment area)
CAM ..... Compliance Assurance Monitoring
CD ..... control device
COMS ..... continuous opacity monitoring system
CVS ..... closed-vent system
D/FW ..... Dallas/Fort Worth (nonattainment area)
DR ..... Designated Representative
ElP ..... El Paso (nonattainment area)
EP ..... emission point
EPA ..... U.S. Environmental Protection Agency
EU ..... emission unit
FCAA Amendments ..... Federal Clean Air Act Amendments
FOP ..... federal operating permit
GF ..... grandfathered
gr/100 scf ..... grains per 100 standard cubic feet
HAP ..... hazardous air pollutant
H/G/B ..... Houston/Galveston/Brazoria (nonattainment area)
H_2S ..... hydrogen sulfide
ID No. ..... identification number
lb/hr ..... pound(s) per hour
MMBtu/hr ..... Million British thermal units per hour
MRRT ..... monitoring, recordkeeping, reporting, and testing
NA ..... nonattainment
N/A ..... not applicable
NADB ..... National Allowance Data Base
NO_x ..... nitrogen oxides
NSPS ..... New Source Performance Standard (40 CFR Part 60)
NSR ..... New Source Review
ORIS ..... Office of Regulatory Information Systems
Pb ..... lead
PBR ..... Permit By Rule
PM ..... particulate matter
ppmv ..... parts per million by volume
PSD ..... prevention of significant deterioration
RO ..... Responsible Official
SO_2 ..... sulfur dioxide
TCEQ ..... Texas Commission on Environmental Quality
TSP ..... total suspended particulate
TVP ..... true vapor pressure
U.S.C. ..... United States Code
VOC ..... volatile organic compound

Appendix B

Major NSR Summary Table

Permit Number: 4980 and PSDTX28M1			Issuance Date: 02/17/2017				
			Emission Rates * (4)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	lb/hr (8)**	TPY***	Spec. Cond.	Spec. Cond.	Spec. Cond.
S03	Unit 4 Main Boiler	NO_X	3983	2488	3, 8, 9, 10, 13, 25	3, 8, 10, 15, 16	3, 9, 10, 17
		SO_2 (6)	6828	29907	3, 25	3, 15, 16	3, 17
		CO (5)	7636	33447	25	15, 16	--
		VOC	434	190	25	15, 16	--
		PM (6)	569	2492	3, 8, 9, 11	3, 8, 15, 11, 16	3, 9, 11, 17
		PM_{10} (6)	569	2492	3, 8, 9, 11	3, 8, 15, 11, 16	3, 9, 11, 17
		$PM_{2.5}$	569	2492	3, 8, 9, 11	3, 8, 15, 11, 16	3, 9, 11, 17
		PM (7)	3763.2	--	20, 25	15, 16, 20	--
		Pb	2	1	--	15, 16	--
		Pb (7)	4.13	--	20	15, 16, 20	--
		Hg	0.83	0.69	--	15, 16	--
		HF	163	714	--	15, 16	--
		H_2SO_4 (6)	208	623	8, 9, 14, 18	8, 15, 16	9
		Ammonia	52	91	8, 9, 12, 13	8, 12, 15, 16	9
S01	Unit 4 Start-Up Boiler East	NO_X	38.4	16.8	--	15	--
		CO	80.0	3.5	--	15	--
		PM (6)	5.3	2.3	--	15	--
		PM_{10} (6)	5.3	2.3	--	15	--
		$PM_{2.5}$	5.3	2.3	--	15	--
		SO_2 (6)	90.9	39.8	--	15	--
		VOC	3.2	0.14	--	15	--
		Pb	0.01	0.01	--	15	--

Permit Number: 4980 and PSDTX28M1			Issuance Date: 02/17/2017				
			Emission Rates * (4)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	lb/hr (8)**	TPY***	Spec. Cond.	Spec. Cond.	Spec. Cond.
S01	Unit 4 Start-Up Boiler West	NO_X	38.4	16.8	--	15	--
		CO	80.0	3.5	--	15	--
		PM(6)	5.3	2.3	--	15	--
		PM_{10}(6)	5.3	2.3	--	15	--
		$PM_{2.5}$	5.3	2.3	--	15	--
		SO_2 (6)	90.9	39.8	--	15	--
		VOC	3.2	0.14	--	15	--
		Pb	0.01	0.01	--	15	--
S4SS	Unit 4 Sorbent Silo	PM	0.069	0.3	--	15, 16	--
		PM_{10}	0.047	0.21	--	15, 16	--
		$PM_{2.5}$	0.011	0.05	--	15, 16	--
SD4AMMPF	Fugitive Leaks	Ammonia	0.07	0.3	6, 7	6, 15, 16	--
MSS-FUG	MSS Fugitives	VOC	34.82	0.36	24, 25	15, 24, 25	--
		PM	4.18	2.91	24, 25	15, 24, 25	--
		NO_X	0.01	0.01	24, 25	15, 24, 25	--
		Ammonia/Urea	14.02	0.14	24, 25	15, 24, 25	--
		CO	0.01	0.01	24, 25	15, 24, 25	--
		SO_2	0.01	0.01	24, 25	15, 24, 25	--

Footnotes:

(1) Emission Point identification – either specific equipment designation or emission point number from plot plan.

(2) Specific point source name. For fugitive sources, use area name or fugitive source name.

(3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
NO_X - total oxides of nitrogen
SO_2 - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$, as represented
PM_{10} - total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$, as represented
CO - carbon monoxide
Pb - lead
Hg - mercury
HF - hydrogen fluoride
H_2SO_4 - sulfuric acid mist

(4) The pound per hour and ton per year emission limits specified in the MAERT for this facility includes emissions from the facility during both normal operations and planned MSS activities, unless otherwise noted.
(5) Emissions authorized by Standard Permit Number 54805.
(6) Emission limits applicable to State and PSD Permit.
(7) MSS hourly emission limit only. The tpy emission limit represented in the MAERT for this facility includes emissions from the facility during both normal operations and planned MSS activities.
(8) For each pollutant whose emissions during planned MSS activities are measured using a CEMS, the MSS lb/hr limits apply only during each clock hour that includes one or more minutes of MSS activities. During all other clock hours, the normal lb/hr limits apply.

* Emission rates are based on and the facilities are limited by the following maximum operating schedule:
__ Hrs/day __ Days/week __ Weeks/year or 8,760 Hrs/year

** Compliance with NO_x, PM/PM_{10}, SO_2, VOC, lead, HF, mercury, ammonia, and H_2SO_4 hourly emission limits is determined on a block 3-hour average basis. Compliance with the CO hourly emission limit is determined on a rolling 30-day average basis.

*** Compliance with annual emission limits is based on a rolling 12-month period.

Texas Commission on Environmental Quality
Air Quality Permit

A Permit Is Hereby Issued To
Luminant Generation Company LLC
Authorizing the Construction and Operation of
Sandow Steam Electric Station
Located at **Rockdale, Milam County, Texas**
Latitude 30° 33′ 51″ Longitude −97° 3′ 50″

Permits: 4980 and PSDTX28M1

Revision Date: February 17, 2017

Expiration Date: April 22, 2026

For the Commission

1. **Facilities** covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendment is approved. [Title 30 Texas Administrative Code (TAC) Section 116.116 (30 TAC § 116.116)] [1]
2. **Voiding of Permit**. A permit or permit amendment is automatically void if the holder fails to begin construction within 18 months of the date of issuance, discontinues construction for more than 18 months prior to completion, or fails to complete construction within a reasonable time. Upon request, the executive director may grant an 18-month extension. Before the extension is granted the permit may be subject to revision based on best available control technology, lowest achievable emission rate, and netting or offsets as applicable. One additional extension of up to 18 months may be granted if the permit holder demonstrates that emissions from the facility will comply with all rules and regulations of the commission, the intent of the Texas Clean Air Act (TCAA), including protection of the public's health and physical property; and (b)(1)the permit holder is a party to litigation not of the permit holder's initiation regarding the issuance of the permit; or (b)(2) the permit holder has spent, or committed to spend, at least 10 percent of the estimated total cost of the project up to a maximum of $5 million. A permit holder granted an extension under subsection (b)(1) of this section may receive one subsequent extension if the permit holder meets the conditions of subsection (b)(2) of this section. [30 TAC § 116.120]
3. **Construction Progress**. Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office of the commission not later than 15 working days after occurrence of the event. [30 TAC § 116.115(b)(2)(A)]
4. **Start-up Notification**. The appropriate air program regional office shall be notified prior to the commencement of operations of the facilities authorized by the permit in such a manner that a representative of the commission may be present. The permit holder shall provide a separate notification for the commencement of operations for each unit of phased construction, which may involve a series of units commencing operations at different times. Prior to operation of the facilities authorized by the permit, the permit holder shall identify the source or sources of allowances to be utilized for compliance with Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program). [30 TAC § 116.115(b)(2)(B)]
5. **Sampling Requirements**. If sampling is required, the permit holder shall contact the commission's Office of Compliance and Enforcement prior to sampling to obtain the proper data forms and procedures. All sampling and testing procedures must be approved by the executive director and coordinated with the regional representatives of the commission. The permit holder is also responsible for providing sampling facilities and conducting the sampling operations or contracting with an independent sampling consultant. [30 TAC § 116.115(b)(2)(C)]

6. **Equivalency of Methods.** The permit holder must demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods, and monitoring methods proposed as alternatives to methods indicated in the conditions of the permit. Alternative methods shall be applied for in writing and must be reviewed and approved by the executive director prior to their use in fulfilling any requirements of the permit. [30 TAC § 116.115(b)(2)(D)]
7. **Recordkeeping.** The permit holder shall maintain a copy of the permit along with records containing the information and data sufficient to demonstrate compliance with the permit, including production records and operating hours; keep all required records in a file at the plant site. If, however, the facility normally operates unattended, records shall be maintained at the nearest staffed location within Texas specified in the application; make the records available at the request of personnel from the commission or any air pollution control program having jurisdiction in a timely manner; comply with any additional recordkeeping requirements specified in special conditions in the permit; and retain information in the file for at least two years following the date that the information or data is obtained. [30 TAC § 116.115(b)(2)(E)]
8. **Maximum Allowable Emission Rates**. The total emissions of air contaminants from any of the sources of emissions must not exceed the values stated on the table attached to the permit entitled "Emission Sources--Maximum Allowable Emission Rates." [30 TAC § 116.115(b)(2)(F)] [1]
9. **Maintenance of Emission Control**. The permitted facilities shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. The permit holder shall provide notification in accordance with 30 TAC §101.201, 101.211, and 101.221 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements; Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements; and Operational Requirements). [30 TAC§ 116.115(b)(2)(G)]
10. **Compliance with Rules**. Acceptance of a permit by an applicant constitutes an acknowledgment and agreement that the permit holder will comply with all rules and orders of the commission issued in conformity with the TCAA and the conditions precedent to the granting of the permit. If more than one state or federal rule or regulation or permit condition is applicable, the most stringent limit or condition shall govern and be the standard by which compliance shall be demonstrated. Acceptance includes consent to the entrance of commission employees and agents into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the permit. [30 TAC § 116.115(b)(2)(H)]
11. **This** permit may not be transferred, assigned, or conveyed by the holder except as provided by rule. [30 TAC § 116.110(e)]
12. **There** may be additional special conditions attached to a permit upon issuance or modification of the permit. Such conditions in a permit may be more restrictive than the requirements of Title 30 of the Texas Administrative Code. [30 TAC § 116.115(c)]
13. **Emissions** from this facility must not cause or contribute to "air pollution" as defined in Texas Health and Safety Code (THSC) §382.003(3) or violate THSC § 382.085. If the executive director determines that such a condition or violation occurs, the holder shall implement additional abatement measures as necessary to control or prevent the condition or violation.
14. **The** permit holder shall comply with all the requirements of this permit. Emissions that exceed the limits of this permit are not authorized and are violations of this permit. [1]

[1] Please be advised that the requirements of this provision of the general conditions may not be applicable to greenhouse gas emissions.

Special Conditions

Permit Numbers 4980 and PSDTX28M1

Emission Rates and Performance Specifications

1. This permit covers only those sources of emissions listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates," and those sources are limited to the emission limits and other conditions specified in that attached table. Compliance with the annual emission limits shall be based on throughput for a rolling 12-month year rather than the calendar year.

2. Emissions from Unit No. 4 Boiler shall not exceed the following:

   A. Sulfuric acid (H_2SO_4),

      (1) 0.027 pound per million British thermal units (lb/MMBtu), based on a three-hour average, and

      (2) 0.020 lb/MMBtu, based on a rolling 12-month average.

   B. Particulate matter (PM), including PM less than ten microns in diameter (PM_{10}), 0.10 lb/MMBtu, based on a three-hour average.

   C. Nitrogen oxides (NO_x),

      (1) Before June 1, 2010,

         (a) 0.60 lb/MMBtu, block three-hour average;

         (b) 0.45 lb/MMBtu, rolling 12-month average; and

      (2) On and after June 1, 2010, 0.080 lb/MMBtu, 30-day rolling average. This limit includes emissions during periods of start-up and shutdown, but excludes emissions during periods of malfunction, if the malfunction constitutes a force majeure event. A force majeure event means an event that that has been or will be caused by circumstances beyond the control of the holder of this permit, its contractors, or any entity controlled by the holder of this permit that causes a malfunction despite the permit holder's best efforts to anticipate any potential force majeure event and to address the effects of any such event; (a) as it is occurring and (b) after it has occurred, such that the malfunction is minimized to the greatest extent possible. Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in whole or in part by poor maintenance or careless operation are not malfunctions.

   D. Ammonia (NH_3),

      (1) 10 parts per million by volume, dry (ppmvd), adjusted to 6 percent oxygen, three-hour average, and

      (2) 4 ppmvd, adjusted to 6 percent oxygen, 12-month rolling average.

   E. Opacity of emissions from the boiler stacks must not exceed 20 percent, averaged over a six-minute period, except for those periods described in Title 30 Texas Administrative Code § 111.111(a)(1)(E) [30 TAC § 111.111(a)(1)(E)].

Federal Applicability

3. These facilities shall comply with applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations in Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), as follows:

   A. Subpart A - General Provisions;

   B. Subpart D - Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction Is Commenced After August 17, 1971.

Cap and Trade

4. Unit No. 4 Boiler is also authorized under Permit Number 45425 as an electing electric generating facility. As such, it is authorized to participate in the cap and trade program authorized in 30 TAC Chapter 101.

Operating Conditions

5. Maximum heat input limitations are as follows:

   A. The maximum heat input for Unit No. 4 Boiler is limited to 7,810 million British thermal units per hour (MMBtu/hr) as a maximum and 7,100 MMBtu/hr based on a rolling 12-month annual average.

   B. Unit 4 Startup Boilers East and West (identified as Emission Point Number [EPN] S01) are each limited to a maximum 10 percent annual capacity factor. Annual capacity factor is the ratio between the actual heat input from all fuels burned during a calendar year and the potential heat input had the boiler been operated for 8,760 hours during a year at the maximum steady state design heat input capacity. The 10 percent annual capacity factor limit corresponds to a heat input of 192,720 million British thermal units (MMBtu) per calendar year per auxiliary boiler. Compliance with this condition shall be demonstrated by maintaining records of fuel use and heat input for each Startup boiler.

   C.

Ammonia Storage and Handling

6. Anhydrous NH_3 storage is subject to the following requirements.

   A. Maximum on-site storage is limited to the two pressure tanks identified in the permit application, with maximum volume of 15,000 gallons each.

   B. The tanks shall be located within

      (1) a physical barrier to vehicular traffic; and

      (2) a containment system which is capable of holding the entire volume of material stored.

   C. Piping and unloading points shall be protected from impact by falling objects.

   D. Each tank vent valve shall be equipped with an alarm which will notify personnel that the relief valve has opened.

E. Tanks shall be vapor balanced to the transport vessel during all tank filling operations. The vapor return line shall be purged back to either the transport vessel or the storage tank after every tank loading operation and prior to disconnection of the line. Interlocks shall be installed so that the unloading pump will not run unless the vapor return line to the transport vessel is connected.

F. All plant personnel assigned to anhydrous NH_3 injection operations shall participate in continuing training in safety guidelines for the handling of anhydrous NH_3, to be conducted no less frequently than once every two years: new and transferred personnel shall complete all initial training required for their specific assignments prior to assumption of their new duties.

G. Overhead activity involving the lifting of heavy equipment above the anhydrous NH_3 storage area shall not be permitted.

H. The holder of this permit shall maintain a complete emergency response plan at the plant site that describes the course of action to be taken by personnel in the event of an anhydrous NH_3 tank or line rupture, or a severe anhydrous NH_3 leak. This plan shall include water-mitigation methods, notification of the proper civil authorities, and any potentially affected residences and any other appropriate organizations. This plan shall be made available upon request to representatives of the TCEQ or any local program having jurisdiction.

7. Audio, olfactory, and visual checks for NH_3 leaks shall be made once per shift within the operating area.

A. No later than one hour following detection of a leak, plant personnel shall take the following actions:

(1) Locate and isolate the leak.

(2) Stop the leak by bypassing the leaking equipment or taking equipment out of service.

B. If the leaking equipment cannot be repaired or replaced within 6 hours, use clamping procedures to prevent the leak until replacement or repair can be performed.

Initial Demonstration of Compliance - SCR Emissions

8. The holder of this permit shall perform stack sampling following startup of the SCR on Sandow Unit No. 4 Boiler to establish the actual quantities of air contaminants being emitted into the atmosphere. Unless otherwise specified in this Special Condition No. 8, the sampling and testing shall be conducted in accordance with the methods and procedures specified in Special Condition No. 9. The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense. The TCEQ Executive Director or his designated representative shall be afforded the opportunity to observe all such sampling.

A. Demonstrate compliance with the performance standards of Special Condition No. 2 and the hourly emission rates of the maximum allowable emission rates table

(MAERT), applicable to normal operations, using the average of three one-hour stack sampling test runs and the NO_x CEMS for the 30-day NO_x performance test.

(1) Air contaminants to be sampled and analyzed include: H_2SO_4, NH_3, PM/PM_{10}, NO_x, and NH_3. Diluents to be measured include O_2 or carbon dioxide (CO_2).

(2) Demonstrate compliance with the opacity performance standard of Special Condition No. 2E applicable to normal operations, using the average of 30 six-minute readings as provided in 40 CFR § 60.11(b).

(3) Boiler load during testing shall be maintained as follows.

(a) Operate at maximum firing rates for the atmospheric conditions occurring during the test as measured by millions of pounds of steam generated per hour or MW of electric generator output. If the steam generating unit is unable to operate at maximum rates during testing, then additional stack testing may be required when higher production rates are achieved.

(b) During 30-day average emission testing, the boiler load does not have to be maximum, but the load must be representative of future operating conditions and must include at least one 24-hour period at full load.

B. Requests to waive testing for any pollutant specified in this condition shall be submitted to the TCEQ Office of Air, Air Permits Division. Test waivers and alternate or equivalent procedure proposals for New Source Performance Standards testing which must have EPA approval shall be submitted to the TCEQ Regional Office.

C. Sampling as required by this condition shall occur within 60 days after first introduction of NH_3 into the SCR. The first day of 30-day average initial performance testing for the NO_x emission limit of Special Condition No. 2 must commence within this time.

Test Methods and Procedures

9. Test Methods and Procedures

A. Sampling shall be conducted in accordance with the appropriate procedures of the TCEQ Sampling Procedures Manual, EPA Methods in 40 CFR Part 60, Appendix A and 40 CFR Part 51, Appendix M, EPA Conditional Test Methods, and National Council for Air and Stream Improvement (NCASI) as follows:

(1) Appendix A, Methods 1 through 4, as appropriate, for exhaust flow, diluent, and moisture concentration;

(2) Appendix A, Method 5 or 17, modified to include back-half condensibles, for the concentration of PM;

(3) Appendix A, Method 7E for the concentrations of NO_x and O_2, or equivalent methods;

(4) Appendix A, Method 9 for opacity;

(5) Appendix A, Method 19, for applicable calculation methods;

(6) EPA Conditional Test Method 27 (CTM-027), for NH_3;

(7) NCASI Method 8A (controlled condensate method) or a modified Method 8A for H_2SO_4 (any method, procedures, or apparatus not identified in the CFR must be approved by the TCEQ and EPA prior to use);

(8) Appendix M, Methods 201A and 202, or Appendix A, Reference Method 5, modified to include back-half condensibles, for the concentration of PM_{10}; and

(9) Any deviations from those procedures must be approved by the Executive Director of the TCEQ prior to sampling.

B. The TCEQ Waco Regional Office shall be given notice as soon as testing is scheduled but not less than 30 days prior to sampling to schedule a pretest meeting.

(1) The notice shall include:

(a) Date for pretest meeting.

(b) Date sampling will occur.

(c) Name of firm conducting sampling.

(d) Type of sampling equipment to be used.

(e) Method or procedure to be used in sampling.

(f) Projected date of commencement of the 30-day rolling average initial performance tests for NO_x.

(2) The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for submitting the test reports.

(3) Prior to the pretest meeting, a written proposed description of any deviation from sampling procedures specified in permit conditions or TCEQ, EPA or ASTM sampling procedures shall be made available to the TCEQ. The TCEQ Regional Director shall approve or disapprove of any deviation from specified sampling procedures.

C. Information in the test report shall include the following data for each test run:

(1) hourly coal firing rate (in tons);

(2) average coal Btu/lb as-received and dry weight;

(3) average steam generation rate in millions of pounds per hour;

(4) average generator output in MW;

(5) control device operating rates, including SCR NH_3 and sorbent injection rates; and

(6) emissions in the units of the limits of this permit, lb/hr and lb/MMBtu, three-hour or 30-day average, as appropriate.

(7) any additional records deemed necessary during the stack sampling pre-test meeting.

D. Two copies of the final sampling report shall be forwarded to the TCEQ within 60 days after sampling is completed. Sampling reports shall comply with the attached conditions of Chapter 14 of the TCEQ Sampling Procedures Manual. The reports shall be distributed as follows:

One copy to the TCEQ Waco Regional Office.

One copy to the TCEQ Austin Office of Air, Air Permits Division.

Continuous Demonstration of Compliance

10. The holder of this permit shall install, calibrate, maintain, and operate a continuous emission monitoring system (CEMS) to measure and record the concentrations of NO_x from EPN S03. Diluents to be measured include O_2 or CO_2. The CEMS data shall be used to determine continuous compliance with the NO_x emission limitations in Special Condition No. 2 and the attached MAERT.

A. The CEMS shall meet the design and performance specifications, pass the field tests, and meet the installation requirements and the data analysis and reporting requirements specified in the applicable Performance Specification Nos. 1 through 9, 40 CFR Part 60, Appendix B or an acceptable alternative. If there are no applicable performance specifications in 40 CFR Part 60, Appendix B, contact the TCEQ Office of Air, Air Permits Division in Austin for requirements to be met.

B. The holder of this permit shall assure that the CEMS meets the applicable quality assurance requirements specified in 40 CFR Part 60, Appendix F, Procedure 1, or an acceptable alternative. Relative accuracy exceedances, as specified in 40 CFR Part 60, Appendix F, § 5.2.3 and any CEMS downtime and all cylinder gas audit exceedances of ± 15 percent accuracy shall be reported semiannually to the appropriate TCEQ Regional Director, and necessary corrective action shall be taken. Supplemental stack concentration measurements may be required at the discretion of the appropriate TCEQ Regional Director.

C. The monitoring data shall be reduced to hourly average concentrations at least once every day, using normally a minimum of four equally-spaced data points from each one-hour period. The individual average concentrations shall be reduced to units of the permit allowable emission rate in pounds per hour at least once every day. Pound per hour data shall be summed on a monthly basis to tons per year and used to determine compliance with the annual emissions limits of this permit. If the CEMS malfunctions, then the recorded concentrations may be reduced to units of the permit allowable as soon as practicable after the CEMS resumes normal operation.

D. The appropriate TCEQ Regional Office shall be notified at least 30 days prior to any required relative accuracy test audits in order to provide them the opportunity to observe the testing.

E. If applicable, each CEMS will be required to meet the design and performance specifications, pass the field tests, and meet the installation requirements and data analysis and reporting requirements specified in the applicable performance

specifications in 40 CFR Part 75, Appendix A and B, as an acceptable alternative to paragraph A of this condition.

F. Each CEMS shall be operational during 95 percent of the operating hours of the Sandow Unit No. 4 Boiler, exclusive of the time required for zero and span checks. If this operational criteria is not met for the reporting quarter, the holder of this permit shall develop and implement a monitor quality improvement plan. The plan should address the downtime issues to improve availability and reliability. The plan should provide additional assurance of compliance including recordkeeping of reagent flow rates for monitor downtime periods.

11. The holder of this permit shall install, calibrate, operate, and maintain a continuous opacity monitoring system (COMS) to measure and record the opacity of emissions from EPN S03. The COMS data shall be used to determine continuous compliance with the opacity emission limitation in Special Condition No. 2E.

A. The COMS shall satisfy all of the Federal NSPS requirements for COMS as specified in 40 CFR Part 60, Appendix B, Performance Specification 1 (PS-1). In order to demonstrate compliance with PS-1, the COMS shall meet the manufacturer=s design and performance specifications, and undergo performance evaluation testing as outlined in 40 CFR Part 60, Subpart A, § 60.13. The TCEQ Regional Director shall be notified 30 days prior to the certification.

B. The COMS shall be zeroed and spanned daily as specified in 40 CFR Part § 60.13. Corrective action shall be taken when the 24-hour span drift exceeds two times the amounts specified in PS-1, or as specified by the TCEQ if not specified in PS-1.

C. The COMS shall satisfy all of the Federal NSPS requirements for COMS as specified in 40 CFR Part 60, Appendix F, Procedure 3 - Quality Assurance Requirements for Continuous Opacity Monitoring Systems at Stationary Sources.

D. The data shall be reduced to six-minute opacity averages, using a minimum of 36 equally-spaced data points from each six-minute period.

E. The COMS shall be operational during 95 percent of the operating hours of the Sandow Unit No. 4 Boiler, exclusive of the time required for zero and span checks. If this operational criteria is not met for the reporting quarter, the holder of this permit shall develop and implement a monitor quality improvement plan. The plan should address the downtime issues to improve availability and reliability. The plan should provide additional assurance of compliance including EPA Reference Method 9 support during daytime monitor downtime periods and parametric support for nighttime monitor downtime periods.

F. Recertification, if required, shall be based on the requirements of 40 CFR Part 60, Appendix B, PS-1 in effect at the time of initial certification.

G. If the COMS data indicates that opacity from the Unit 4 Main Boiler (EPN S03) exceeds 20% averaged over a 3 hour block period, then the permit holder shall report that occurrence as required by 40 CFR §64.9(a) and take action required by 40 CFR §64.7(d).

The 3 hour block will start at the beginning of each clock hour of the day and end at the third clock hour (i.e. 0000-0300, 0300-0600, etc.). A valid 3 hour block shall

consist of at least 28 of the 30 six minute readings that the boiler is in operation. Monitoring data shall not be included in the 3-hour block average during periods of monitoring malfunctions, associated repairs, and required quality assurance or control activities as specified in 40 CFR §64.7(c).

12. The holder of this permit shall install, calibrate, operate, and maintain a CEMS to measure and record the concentration of NH_3 from EPN S03. The NH_3 concentrations shall be corrected and reported in accordance with Special Condition No. 2. When the NH_3 concentration is corrected based upon the measured CO_2 concentration, for any hour during which the measured CO_2 concentration is less than 5 percent, a diluent cap value of 5 percent may be used to correct the NH_3 concentration. When the NH_3 concentration is corrected using the measured O_2 concentration, for any hour during which the measured O_2 concentration is greater than 19 percent, a diluent cap value of 19 percent may be used to correct NH_3 concentrations. The CEMS data shall be used to determine continuous compliance with the NH_3 performance specifications in Special Condition No. 2 and the MAERT. Any other method used for measuring NH_3 slip shall require prior approval from the TCEQ Waco Regional Office, with consultation between the Regional Office and the TCEQ Austin Air Permits Division.

13. If any emission monitor fails to meet specified performance, it shall be repaired or replaced as soon as reasonably possible.

14. Compliance with the H_2SO_4 emission rates in the MAERT for start-up and shutdown will be demonstrated if the SO_2 emissions during start-up and shutdown are in compliance with the SO_2 emission rate in the MAERT for start-up and shutdown.

Recordkeeping Requirements

15. The following records shall be kept at the plant for the life of the permit. All records required in this permit shall be made immediately available at the request of personnel from the TCEQ, the EPA, or any air pollution control agency with jurisdiction.

    A. A copy of this permit.

    B. A complete copy of the testing reports and records of the initial air emissions performance testing completed pursuant to the Initial Demonstration of Compliance.

    C. Required stack sampling results or other air emissions testing (other than CEMS or COMS data) that may be conducted on units authorized under this permit after the date of issuance of this permit.

16. The following records shall be kept for a minimum of five years after collection and shall be made immediately available upon request to representatives of the TCEQ, the EPA, or any local air pollution control program having jurisdiction. Records shall be legible and maintained in an orderly manner. The following records shall be maintained:

    A. Continuous monitoring data for NO_x, NH_3, and diluent gases, O_2 or CO_2, from CEMS and opacity data from COMS to demonstrate compliance with the emission rates listed in the MAERT and performance standards listed in this permit. Data retention

at intervals less than one hour is not required. Records should identify the times when emissions data have been excluded from the calculation of average emission rates because of start-up, shutdown, maintenance, and malfunction along with the justification for excluding data. Records should also identify factors used in calculations that are used to demonstrate compliance with emissions limits and performance standards.

B. Files of all CEMS or COMS quality assurance measures, calibration checks, adjustments and maintenance performed on these systems.

C. Average coal feed rate to the Unit No. 4 Boiler in pounds per hour and the corresponding average heat input (HHV) in MMBtu/hr, based upon an average over each calendar month.

D. Ammonia feed rate and sorbent feed rate.

E. Records of cleaning and maintenance performed on abatement equipment (SCR and mercury sorbent systems). A log should be kept with descriptions of the activity performed and the time period over which it was performed.

F. Records required to show compliance with 40 CFR Part 60, Subparts A and D, including records of required reporting.

G. Records of audio, olfactory, and visual checks for NH_3 leaks and repairs to show compliance with Special Condition No. 7.

Reporting

17. The holder of this permit shall submit to the TCEQ Waco Regional Office quarterly reports as described in 40 CFR § 60.7 for the emission rate limits of 40 CFR Part 60. Such reports are required for each emission unit which is required to be continuously monitored pursuant to this permit. **(2/17)**

Adjustment of H_2SO_4 Limits to Reflect Initial Performance Test

18. Adjustment of H_2SO_4 Limits to Reflect Initial Performance Test

A. The Executive Director of the TCEQ believes that the controlled condensate system method (CCSM) is a more accurate and reliable method than EPA Reference Method 8 for measurement of H_2SO_4 emissions from coal-fired electric generating facilities (EGFs). Current literature reflects that Reference Method 8 has an erratic and positive bias with respect to H_2SO_4 measurements when the sample contains sulfur dioxide and other products of coal combustion at concentrations typical of coal-fired EGF exhaust streams, such as the exhaust stream of Sandow Unit No. 4 Boiler. This Special Condition is conditioned on measurement of H_2SO_4 emissions from Sandow Unit No. 4 SCR using either: (1) the CCS Method as approved by the Executive Director of the TCEQ or his designated representative and the EPA; or (2) a new EPA test method, if EPA adopts a more appropriate H_2SO_4 test method for coal-fired EGFs by the time of the pretest meeting required in Special Condition No. 8.

B. If the average of the sampling for H_2SO_4 is 50 percent or less of the currently permitted values for H_2SO_4, then no later than June 30, 2011, the holder of this permit shall submit a permit alteration request to reduce the H_2SO_4 emissions allowed in Special Condition No. 2 and in the MAERT. The adjustment shall consider the results of the stack testing and the potential for data variability.

Routine Maintenance, Startup, and Shutdown

19. This permit authorizes the emissions from the planned maintenance, startup, and shutdown (MSS) activities listed in Attachment A, Attachment B, or the MAERT attached to this permit. Attachment A identifies the inherently low emitting (ILE) planned maintenance activities that this permit authorizes to be performed. Attachment B identifies the planned MSS activities that are non-ILE planned maintenance activities that this permit authorizes to be performed.

20. Opacity greater than 20 percent from EPN S03 is authorized when the permit holder complies with the MSS duration limitations and other applicable work practices identified below.

A. Emissions during planned startup and shutdown activities shall be minimized by limiting the duration of operation in planned startup and shutdown mode as follows:

(1) A planned startup of the EGF with EPN S03 is defined as the period that begins when the induced draft fans start operation and ends when the utility boiler reaches stable load and ESP operations have been fully optimized.

(a) A planned startup of the EGF shall not exceed 24 hours, except as allowed in Special Condition No. 20 (A)(1)(b).

(b) An extended planned startup is defined as a startup that lasts more than 24 hours. The total amount of incremental time the extended startups exceed 24 hours shall not exceed 300 hours on an annual calendar year basis.

(2) A planned shutdown of the EGF with EPN S03 is defined as the period that begins when the electrostatic precipitator is partially or completely de-energized due to reaching its minimum operating temperature and ends when a temperature has been reached that allows personnel to enter the structure and conduct maintenance activities.

(a) A planned shutdown of the EGF shall not exceed 24 hours, except as allowed in Special Condition No. 20 (A)(2)(b).

(b) An extended planned shutdown is defined as a shutdown that lasts more than 24 hours. The total amount of incremental time the extended shutdowns exceed 24 hours shall not exceed 300 hours on an annual calendar year basis.

B. Emissions during planned startup and shutdown activities shall be minimized by employing the following work practices. The EGF with EPN S03 will comply with the boiler and ESP manufacturer's operating procedures or the permittee's

written Standard Operating Procedures manual during planned MSS, and will operate in a manner consistent with those procedures to minimize opacity by placing the ESP into service as soon as practical during planned startups or removing the ESP from service as late as possible during planned shutdowns, once the air heater outlet temperature is between 200 and 300 degrees F, but not longer than the durations identified in Special Condition No. 20 (A). The manufacturer's operating procedures or written Standard Operating Procedure manual shall be located on-site and available to the TCEQ regional investigator.

C. Periods of opacity greater than 20 percent from EPN S03 from planned online and offline maintenance activities identified in Attachment A or B is authorized for no more than 535 hours in a calendar year.

D. The permit holder shall keep records to identify periods of planned MSS, the opacity measured by the COMS for the duration of the planned MSS activities, and the work practices in Special Condition No. 20 (B) are followed during the planned MSS activities for the purpose of demonstrating compliance with this permit special condition.

E. For periods of maintenance, startup, and shutdown other than those subject to Paragraphs A - C of this condition, 30 TAC § 111.111, 111.153, and Chapter 101, Subchapter F apply.

21. When a planned maintenance activity identified in Attachment B is associated with a VOC liquid storage facility and may result in VOC emissions from that facility, the permit holder shall not open that facility to the atmosphere in connection with the planned maintenance activity until the VOC liquids are removed from that facility to the maximum extent practicable.

22. No vacuum pump on a vacuum truck that is used to move solids (such as ash) during planned maintenance activities shall be operated unless the vacuum system exhaust is routed to a filtering system.

23. Vacuum trucks that are used to move liquids during planned maintenance activities shall utilize submerged loading.

24. Compliance with the emissions limits for planned MSS activities identified in the MAERT attached to this permit may be demonstrated as follows.

A. For each pollutant emitted during ILE planned maintenance activities, the permit holder shall annually confirm the continued validity of the estimated potential to emit represented in the permit application for all ILE planned maintenance activities. The total emissions from all ILE planned maintenance activities (See Attachment A) shall be considered to be no more than the estimated potential to emit for those activities that are represented in the permit application.

B. For each pollutant emitted during non-ILE planned MSS activities (See Attachment B) whose emissions are measured using a CEMS, as per Special Condition No. 25A, the permit holder shall compare the pollutant's short-term (hourly) emissions during planned MSS activities as measured by the CEMS to the applicable short-term planned MSS emissions limit in the MAERT.

C. For each pollutant emitted during non-ILE planned MSS activities (See Attachment B) whose emissions occur through a stack, but are not measured using CEMS as per Special Condition No. 25A, the permit holder shall determine the total emissions of the pollutant through the stack that result from such non-ILE planned MSS activities in accordance with Special Condition No. 25B.

D. For each pollutant emitted during non-ILE planned MSS activities (See Attachment B) whose emissions do not occur through a stack, the permit holder shall do the following for each calendar month.

(1) Determine the total emissions of the pollutant from such non-ILE planned MSS activities in accordance with Special Condition No. 25B.

(2) Once monthly emissions have been determined in accordance with Special Condition No. 24D(1) for 12 months after the MSS permit amendment has been issued, the permit holder shall compare the sum of the rolling 12-month emissions for the pollutant for all non-ILE planned MSS activities to the annual emissions limit for the pollutant in the MAERT.

25. The permit holder shall determine the emissions during planned MSS activities for use in Special Condition No. 24 as follows.

A. For each pollutant whose emissions during normal facility operations are measured with a CEMS that has been certified to measure the pollutant's emissions over the entire range of a planned MSS activity, the permit holder shall measure the emissions of the pollutant during the planned MSS activity using the CEMS.

B. For each pollutant not described in Special Condition No. 25A, the permit holder shall calculate the pollutant's emissions during all occurrences of each type of planned MSS activity for each calendar month using the frequency of the planned MSS activity identified in work orders or equivalent records and the emissions of the pollutant during the planned MSS activity as represented in the planned MSS permit application. In lieu of using the emissions of the pollutant during the planned MSS activity as represented in the planned MSS permit application to calculate such emissions, the permit holder may determine the emissions of the pollutant during the planned MSS activity using an appropriate method, including but not limited to, any of the methods described in paragraphs 1 through 4 below, provided that the permit holder maintains appropriate records supporting such determination:

(1) Use of emission factor(s), facility-specific parameter(s), and/or engineering knowledge of the facility's operations.

(2) Use of emissions data measured (by a CEMS or during emissions testing) during the same type of planned MSS activity occurring at or on a similar facility, and correlation of that data with the facility's relevant operating parameters, including, but not limited to, electric load, temperature, fuel input, and fuel sulfur content.

(3) Use of emissions testing data collected during a planned MSS activity occurring at or on the facility, and correlation of that data with the facility's relevant operating parameters, including, but not limited to, electric load, temperature, fuel input, and fuel sulfur content.

(4) Use of parametric monitoring system (PEMS) data applicable to the facility.

26. With the exception of the emission limits in the MAERT attached to this permit, the permit conditions relating to planned MSS activities do not become effective until 60 days after issuance of the permit amendment that added such conditions.

Standard Permits

27. The following facilities are authorized by Standard Permits. These authorizations are listed here for reference purposes only.

Facilities	Standard Permit Type	Registration Number
Dry Sorbent Injection System and Storage Silos	Pollution Control Project	97146
Mercury Sorbent Enhancement Additives Storage and Injection	Pollution Control Project	125855

Date: February 17, 2017

Attachment A

Permit Nos. 4980 and PSDTX28M1

Inherently Low Emitting (ILE) Planned Maintenance Activities

Planned Maintenance Activity	Emissions					
	NH_3/Urea	VOC	NO_x	CO	PM	SO_2
Miscellaneous particulate filter maintenance[1]					X	
Maintenance of storage vessels storing material with vapor pressure <0.5 psia	X	X				
Maintenance of storage vessels storing gasoline or other material with vapor pressure >0.5 psia that does not require clearing of the vessels to allow for entry of personnel	X	X				
Boiler general maintenance[2]					X	
Management of sludge from pits, ponds, sumps, and water conveyances[3]		X				
Inspection, repair, replacement, adjusting, testing, and calibration of analytical equipment, process instruments including sight glasses, meters, gauges, CEMS, PEMS.		X	X	X		X
Deslagging of boiler[4]		X	X	X	X	
Material handling system maintenance[5]					X	
Small equipment and fugitive component repair/replacement in VOC and inorganic service[6]	X	X				

Notes:

1. Includes, but is not limited to, baghouse filters, ash silo/transfer filters, coal handling filters, process-related building air filters, and combustion turbine air intake filters.

2. Includes pre-heater basket handling and maintenance, refractory change-out, fan maintenance and balancing, damper, air heater, and soot blower maintenance, and any other general boiler maintenance that does not exceed the worst-case emissions representation in the application.

3. Includes, but is not limited to, management by vacuum truck/dewatering of materials in open pits and ponds, and sumps, tanks and other closed or open vessels. Materials managed include water and sludge mixtures containing miscellaneous VOCs such as diesel, lube oil, and other waste oils.

4. Includes, but is not limited to, explosive blasting, clinker shooting, and other boiler deslagging activities; does not include dry abrasive blasting that may occur in boilers.

5. Material handling system equipment includes, but is not limited to, silos, transport systems, coal bunkers, coal crushing equipment, coal handling, nuvafeeders, hoppers,

FGD sludge handling system. Materials handled include coal, ash, limestone, gypsum, mercury, and sorbents.

6. Includes, but is not limited to, (i) repair/replacement of pumps, compressors, valves, pipes, flanges, transport lines, filters and screens in natural gas, fuel oil, diesel oil, ammonia, lube oil, and gasoline service, (ii) vehicle and mobile equipment maintenance that may involve small VOC emissions, such as oil changes, transmission service, and hydraulic system service, and (iii) off-line NO_x control device maintenance (including maintenance of the anhydrous ammonia systems and aqueous ammonia systems associated with SCR systems and SNCR systems)

Date: April 22, 2016

Attachment B

Permit Nos. 4980 and PSDTX28M1

Non-Inherently Low Emitting Planned MSS Activities

Planned Maintenance Activity	Emissions						
	EPN	NH_3/Urea	VOC	NO_x	CO	PM	SO_2
Combustion optimization[1]	S03		X	X	X	X	X
Vacuum truck solids loading[2]	MSSFUG					X	
Vacuum truck solids unloading	MSSFUG					X	
Maintenance of storage vessels storing gasoline or other material with vapor pressure >0.5 psia that requires clearing of the vessels to allow for entry of personnel	MSSFUG	X	X				
Flue gas conditioning system maintenance - unit online	S03	X				X	
Flue gas conditioning system maintenance fugitives - unit offline[3]	MSSFUG	X				X	
NO_x control device maintenance - unit online	S03	X		X			
PM control device maintenance - unit online	S03					X	
SO_2 control device maintenance - unit online	S03						X
Smoke test of boiler	S03			X	X	X	X
Smoke test of boiler fugitives	MSSFUG			X	X	X	X
Testing of oil guns[4]	S03		X	X	X	X	X
Use of fans during maintenance - unit offline	S03					X	
Main unit Planned Startup and Planned Shutdown	S03	X	X	X	X	X	X

Notes:

1. Includes, but is not limited to, (i) leak and operability checks (e.g., turbine over-speed tests, troubleshooting), (ii) balancing, and (iii) tuning activities that occur during seasonal tuning or after the completion of initial construction, a combustor change-out, a major repair, maintenance to a combustor, or other similar circumstances.

2. Includes site-wide solids vacuuming operations (e.g., SCR, baghouse, ESP, ducts, furnace, loop seals, stripper coolers, and airlocks).

3. Includes, but is not limited to, maintenance of anhydrous ammonia systems and aqueous ammonia systems used to condition flue gas before it is controlled by a PM control device.

4. Includes readiness testing for oil firing system.

Date: April 22, 2016

Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 4980 and PSDTX28M1

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

Air Contaminants Data

Emission Point No. (1)	**Source Name (2)**	**Air Contaminant Name (3)**	**Emission Rates* (4)**	
			lbs/hour (8)**	**TPY*****
S03	Unit 4 Main Boiler	NO_x	3983	2488
		SO_2 (6)	6828	29907
		CO (5)	7636	33447
		VOC	434	190
		PM (6)	569	2492
		PM_{10} (6)	569	2492
		$PM_{2.5}$	569	2492
		PM (7)	3763.2	--
		Pb	2	1
		Pb (7)	4.13	--
		Hg	0.83	0.69
		HF	163	714
		H_2SO_4 (6)	208	623
		Ammonia	52	91
S01	Unit 4 Start-Up Boiler East	NO_x	38.4	16.8
		CO	80.0	3.5
		PM (6)	5.3	2.3
		PM_{10} (6)	5.3	2.3
		$PM_{2.5}$	5.3	2.3

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates* (4)	
			lbs/hour (8)**	TPY***
		SO_2 (6)	90.9	39.8
		VOC	3.2	0.14
		Pb	0.01	0.01
S01	Unit 4 Start-Up Boiler West	NO_x	38.4	16.8
		CO	80.0	3.5
		PM (6)	5.3	2.3
		PM_{10} (6)	5.3	2.3
		$PM_{2.5}$	5.3	2.3
		SO_2 (6)	90.9	39.8
		VOC	3.2	0.14
		Pb	0.01	0.01
S4SS	Unit 4 Sorbent Silo	PM	0.069	0.3
		PM_{10}	0.047	0.21
		$PM_{2.5}$	0.011	0.05
SD4AMMPF	Fugitive Leaks	Ammonia	0.07	0.3
MSS-FUG	MSS Fugitives	VOC	34.82	0.36
		PM	4.18	2.91
		NO_x	0.01	0.01
		Ammonia/Urea	14.02	0.14
		CO	0.01	0.01
		SO_2	0.01	0.01

Emission Sources - Maximum Allowable Emission Rates

(1) Emission point identification - either specific equipment designation or emission point number from plot plan.
(2) Specific point source name. For fugitive sources, use area name or fugitive source name.
(3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
NO_x - total oxides of nitrogen
SO_2 - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$, as represented
PM_{10} - total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$, as represented
$PM_{2.5}$ - total particulate matter equal to or less than 2.5 microns in diameter, as represented
CO - carbon monoxide
Pb - lead
Hg - mercury
HF - hydrogen fluoride
H_2SO_4 - sulfuric acid mist
(4) The pound per hour and ton per year emission limits specified in the MAERT for this facility includes emissions from the facility during both normal operations and planned MSS activities, unless otherwise noted.
(5) Emissions authorized by Standard Permit Number 54805.
(6) Emission limits applicable to State and PSD Permit.
(7) MSS hourly emission limit only. The tpy emission limit represented in the MAERT for this facility includes emissions from the facility during both normal operations and planned MSS activities.
(8) For each pollutant whose emissions during planned MSS activities are measured using a CEMS, the MSS lb/hr limits apply only during each clock hour that includes one or more minutes of MSS activities. During all other clock hours, the normal lb/hr limits apply.

* Emission rates are based on and the facilities are limited by the following maximum operating schedule:

___Hrs/day ___Days/week ___Weeks/year or 8,760 Hrs/year

** Compliance with NO_x, PM/PM_{10}, SO_2, VOC, lead, HF, mercury, ammonia, and H_2SO_4 hourly emission limits is determined on a block 3-hour average basis. Compliance with the CO hourly emission limit is determined on a rolling 30-day average basis.

*** Compliance with annual emission limits is based on a rolling 12-month period.

Date: April 22, 2016